May 25, 1990

Dr. Marvin T. Miura, Director  
Office of Environmental Quality Control  
State of Hawaii  
465 South King Street, Room 104  
Honolulu, Hawaii  96813

Dear Dr. Miura:

Final Environmental Impact Statement (FEIS)  
Proposed Kapolei Business-Industrial Park  
TMKs 9-1-14: Por. 2 and 9-1-15: 1, 13, 16

We are notifying you of our acceptance of the above EIS in fulfillment of the requirements of Chapter 343, HRS, and the EIS Rules.

There are a number of concerns that must be addressed prior to the subsequent zoning process.

These issues are discussed in the attached Acceptance Report. If there are any questions, please contact Randy Hara of my staff at 523-4483.

Sincerely,

BENJAMIN B. LEE  
Chief Planning Officer

BBL:ft  
Attachment  
cc: William E. Wanket
1990 - Oahu - FEIS - Kapolei Business
Final Environmental Impact Statement
KAPOLEI BUSINESS-INDUSTRIAL PARK

prepared for: The Estate of James Campbell
prepared by: William E. Wanket, Land Use Consultant

Volume I
April 1990
<table>
<thead>
<tr>
<th>Date</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>SEP 1 8 1033</td>
<td></td>
</tr>
<tr>
<td>JAN 5 2000</td>
<td></td>
</tr>
<tr>
<td>July 14 2005</td>
<td></td>
</tr>
</tbody>
</table>
FINAL
ENVIRONMENTAL IMPACT STATEMENT
VOLUME I
KAPOLEI BUSINESS-INDUSTRIAL PARK
Ewa, Oahu
April 1990

Submitted pursuant to Chapter 343, Hawaii Revised Statutes, Environmental Impact Statement Regulations.

Prepared For: THE ESTATE OF JAMES CAMPBELL
For Submittal To: DEPARTMENT OF GENERAL PLANNING
Prepared by: WILLIAM E. WANKET, INC.

William E. Wanket, President
Pacific Tower 660
1001 Bishop Street
Honolulu, Hawaii 96813
Environmental Impact Statement
KAPOLEI BUSINESS-INDUSTRIAL PARK

5. Moanalua Gardens Foundation
6. Gelber, Gelber and Ingersoll
7. Kay K. Kon
8. Mark Maeda
9. Robert W. Peck
10. Randolph W. Scoville
11. Marie Sugita
12. Alan C. Ziegler

Reproduced on the following pages (Blue Section) is OEQC's Distribution List of those receiving copies of the DEIS, followed by the comment letters received and the letters prepared in response. Copies of the previously mentioned acknowledgement letters are not included, but are available upon request.
Table of Contents

PAGE

SUMMARY .........................................................................................................................1
NEED FOR EIS .................................................................................................................1
PURPOSE OF EIS .............................................................................................................1
PLANNING PERSPECTIVE ..............................................................................................2
BENEFICIAL IMPACTS .....................................................................................................6
ADVERSE IMPACTS .........................................................................................................7
ALTERNATIVES CONSIDERED .......................................................................................9
UNRESOLVED ISSUES .....................................................................................................9
COMPATIBILITY WITH LAND USE PLANS AND POLICIES ....................................11
NECESSARY PERMITS AND APPROVALS .....................................................................11

I. PROJECT DESCRIPTION ..............................................................................................12
   A. LOCATION AND SIZE ..............................................................................................12
   B. LAND USE PLAN .....................................................................................................12
      1. Maritime Industrial .............................................................................................12
      2. Intensive Industrial .............................................................................................13
      3. Commercial .........................................................................................................14
   C. PUBLIC FACILITIES ...............................................................................................14
      1. Water ..................................................................................................................15
      2. Wastewater .........................................................................................................15
      3. Solid Waste and Disposal ..................................................................................16
      4. Drainage / Grading .............................................................................................16
      5. Electrical and Communications .........................................................................17
      6. Circulation ...........................................................................................................17
   D. PHASING PLAN/ESTIMATED COSTS ..................................................................17


**Table of Contents (Continued)**

E. CHANGES IN LAND USE DESIGNATIONS REQUIRED TO IMPLEMENT THE PROJECT .................................................. 18

II. FEASIBILITY ........................................................................ 19
   A. MARKET ANALYSIS ............................................................ 19
   B. FUTURE DEMAND ............................................................. 20
       1. Demand for I-2 Land .................................................. 21
       2. Demand for I-3 Land .................................................. 21
       3. Demand for Commercial Land ...................................... 22
   C. ABSORPTION OF ACREAGE ............................................. 22
   D. EMPLOYMENT/BUILDING SQUARE FOOTAGE
      ESTIMATES ................................................................. 22
   E. LABOR AVAILABILITY ..................................................... 23
   F. RELATIONSHIP OF PROJECT TO THE REGION .................. 23
   G. SUMMARY ..................................................................... 23

III. PHYSICAL ENVIRONMENT ASSESSMENT ............................... 24
   A. TOPOGRAPHY/GEOL OGY ............................................... 24
   B. SOIL CHARACTERISTICS ................................................ 26
   C. FLORA ......................................................................... 28
   D. FAUNA .......................................................................... 30
   E. ARCHAEOLOGICAL / HISTORIC ........................................ 31
   F. NOISE ........................................................................... 35
   G. VIEW ASSESSMENT ........................................................ 36
   H. AIR QUALITY .................................................................. 38
   I. HAZARDS ...................................................................... 40
       1. Industrial Slag ............................................................ 40
       2. Industrial Pollution .................................................... 41
       3. Aircraft Clearance ...................................................... 42
       4. Aircraft Noise ............................................................ 42
       5. Flooding / Earthquakes / Vulcanism .............................. 42
       6. Barbers Point Harbor Safety Buffer Zone ...................... 43

IV. SOCIO-ECONOMIC ASSESSMENT ........................................ 44
   A. SOCIAL IMPACT ASSESSMENT ........................................ 44
       1. Profile Of The Existing Community ............................... 44
       2. Policies And Proposals Which Will Aff ect The
          Community's Future .................................................... 51
       3. Community Issues On Kapolei Business-Industrial Park ....... 52
4. Potential Social Impacts Of The Kapolei Business-industrial Park ........................................ 56
B. AGRICULTURAL IMPACT .......................................................... 60
  1. Classification System ......................................................... 61
  2. Impact on O&SC ................................................................. 63
  3. Impact on Existing Diversified Agriculture Operation .......... 65
  4. Impact on the Growth of Diversified Agriculture ................. 65
  5. Consistency with State and County Plans ............................ 66
C. IMPACT ON STATE AND COUNTY FINANCES .......................... 67
V. PUBLIC SERVICES AND FACILITIES ASSESSMENT .................. 70
A. TRANSPORTATION / TRAFFIC .............................................. 70
B. WATER ................................................................................. 73
C. WASTEWATER ................................................................. 75
D. SOLID WASTE AND DISPOSAL ........................................... 76
E. DRAINAGE .......................................................................... 77
F. SOIL EROSION ................................................................. 78
G. ELECTRICAL AND COMMUNICATIONS ............................... 80
H. POLICE PROTECTION ............................................................ 82
I. FIRE PROTECTION ............................................................... 82
J. SCHOOLS .............................................................................. 82
K. PARKS AND RECREATION FACILITIES ................................. 83
L. EDUCATION AND CHILD CARE .......................................... 83
M. EMERGENCY AND MEDICAL FACILITIES ......................... 83
VI. RELATIONSHIP TO LAND USE POLICIES AND REGULATIONS ................................. 85
A. FEDERAL .............................................................................. 85
B. STATE OF HAWAII ............................................................... 85
   1. Hawaii State Plan ............................................................ 85
   2. State Functional Plans ...................................................... 95
   3. State Land Use Law ........................................................ 97
   4. Hawaii Coastal Zone Management Program ...................... 98
C. CITY .................................................................................. 98
   1. General Plan .................................................................. 98
   2. Development Plan ......................................................... 101
   3. Social Impact of Development ....................................... 102
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>VII. PROBABLE ADVERSE ENVIRONMENTAL EFFECTS</td>
<td>103</td>
</tr>
<tr>
<td>VIII. ALTERNATIVES TO THE PROPOSED ACTION</td>
<td>106</td>
</tr>
<tr>
<td>A. NO-ACTION ALTERNATIVE</td>
<td>106</td>
</tr>
<tr>
<td>B. AGRICULTURAL ALTERNATIVE</td>
<td>106</td>
</tr>
<tr>
<td>C. MIXED USE ALTERNATIVE</td>
<td>107</td>
</tr>
<tr>
<td>IX. RELATIONSHIP BETWEEN LOCAL SHORT-TERM USES OF MAN'S ENVIRONMENT AND THE MAINTENANCE AND ENHANCEMENT OF LONG-TERM PRODUCTIVITY</td>
<td>109</td>
</tr>
<tr>
<td>X. IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES</td>
<td>110</td>
</tr>
<tr>
<td>XI. INTERESTS AND GOVERNMENTAL POLICY CONSIDERATIONS THOUGHT TO OFFSET THE ADVERSE ENVIRONMENTAL EFFECTS OF THE PROPOSED PROJECT</td>
<td>111</td>
</tr>
<tr>
<td>XII. MAJOR PERMITS AND APPROVALS</td>
<td>112</td>
</tr>
<tr>
<td>XIII. LIST OF CONSULTANTS INVOLVED IN PREPARATION OF EIS</td>
<td>113</td>
</tr>
<tr>
<td>XIV. CONSULTED PARTIES AND COMMENTS RECEIVED DURING THE PREPARATION OF THE DRAFT EIS</td>
<td>114</td>
</tr>
<tr>
<td>XV. COMMENTS RECEIVED DURING THE PREPARATION OF THE FINAL EIS</td>
<td>117</td>
</tr>
</tbody>
</table>
List of Figures

[FIGURES FOLLOW THIS SECTION]

1A. LOCATION / BOUNDARY MAP
1B. STATE LAND USE MAP
2. PROPOSED DEVELOPMENT PLAN LAND USE MAP
3. EXISTING DEVELOPMENT PLAN LAND USE MAP
4. EXISTING DEVELOPMENT PLAN PUBLIC FACILITIES MAP
5. EXISTING ZONING MAP
6. PROPOSED ZONING MAP
7. EXISTING LAND USES
8. TOPOGRAPHIC MAP
9. SOILS MAP
10. FLOOD ZONE MAP
11. VIEW ASSESSMENT, PHOTOGRAPHS
12. VIEW ASSESSMENT, PHOTOGRAPHS
13. VIEW ASSESSMENT, PHOTOGRAPHS
14. PRELIMINARY PHASING PLAN
15. TRAFFIC STUDY INTERSECTIONS
16. RECOMMENDED ROADWAY IMPROVEMENTS FOR KALAELOA BOULEVARD
17. IMAGINARY SURFACES
18. 1989 AICUZ MAP
List of Appendices

[The following Technical Reports are contained in \textit{VOLUME II} of the FEIS.]

A. Preliminary Engineering Report For Kapolei Business-Industrial Park, Ewa, Oahu, Hawaii\newline\textit{Engineering Concepts, Inc.}

B. Botanical Survey Campbell Estate Commercial-Industrial Project Ewa District, Island of Oahu\newline\textit{Char And Associates}

C. Campbell Drainage Channel, Ewa District, Island of Oahu\newline\textit{Char And Associates}

D. Survey of the Avifauna and Feral Mammals at the Proposed Campbell Commercial-Industrial Site, Ewa, Oahu\newline\textit{Phillip L. Bruner}

E. An Archaeological Assessment for the Proposed Kapolei Business-Industrial Park, Honouliuli, 'Ewa, O'ahu\newline\textit{Cultural Surveys Hawaii}

F. Noise Impact Assessment, Proposed Campbell Commercial-Industrial Center, Oahu\newline\textit{Darby And Associates}

G. Visual Assessment\newline\textit{Michael S. Chu}

H. Air Quality Impact Reports, Kapolei Business-Industrial Park\newline\textit{Jim W. Morrow}

I. Kapolei Business-Industrial Park, Social Impact Assessment\newline\textit{Earthplan}

J. Proposed Kapolei Business-Industrial Park: Impact on Agriculture\newline\textit{Decision Analysts Hawaii, Inc.}
K. Proposed Kapolei Business-Industrial Park: Impact on State And County Finances
   Decision Analysts Hawaii, Inc.

   Pacific Planning And Engineering, Inc.

M. Kapolei Business-Industrial Park, Market Assessment
   John Zapotocky
SUMMARY

NEED FOR EIS

An Application for a Development Plan (DP) Amendment and Environmental Assessment was submitted to the City and County of Honolulu, Department of General Planning in September 1989. Because the proposed DP Amendment involved a non-county initiated amendment to the City and County of Honolulu Development Plans and would result in designations other than agriculture and preservation, the proposed action was subject to the provisions of the Environmental Impact Statement Law, Chapter 343, HRS [Section 343-5 (a)(6)].

In reviewing the DP amendment, the Department of General Planning ("accepting authority") determined that the proposed action may have a significant effect on the environment, and filed on October 9, 1989 an Environmental Impact Statement Preparation Notice (EISPN) with the Office of Environmental Quality Control (OEQC). Notice of the determination was subsequently published in the October 23, 1989 OEQC Bulletin. Copies of the EISPN were sent to various consulting parties (see Chapter XIV for listing and comments received).

The Draft Environmental Impact Statement (DEIS) was prepared and submitted to OEQC and the City Department of General Planning in December 1989. Notice of the DEIS was initially published in the OEQC’s Bulletin of December 23, 1989. OEQC distributed the copies (60) and a total of 39 comments were received. The applicant responded to all comments, including late comments. Chapter XV contains OEQC’s distribution list, comment letters received and response letters sent.

This Final Environmental Impact Statement is being submitted in 2-Volumes. Volume II contains the Technical Appendices. The FEIS was filed with the Office of Environmental Quality Control in April 1990.

PURPOSE OF EIS

The purpose of this Environmental Impact Statement (EIS) is to:

(1) Describe the proposed DP Amendment to establish the Kapolei Business-Industrial Park in Ewa ("proposed action");
Environmental Impact Statement
KAPOLEI BUSINESS-INDUSTRIAL PARK

(2) Disclose the probable environmental effects of the proposed development;

(3) Describe measures proposed to minimize adverse effects; and,

(4) Discuss alternatives to the proposed development.

In appropriate sections, impacts resulting from the project as well as ambient development have been addressed to provide a view of regional, developing Second Urban Center requirements.

PLANNING PERSPECTIVE

The project area is part of the designated Secondary Urban Center (1977) and represents one of the few remaining "pocket" areas still designated Agriculture on the Ewa Development Plan. This land area is strategically located between the developing Barbers Point Harbor, the existing industrial activities within Campbell Industrial Park, and the emerging City of Kapolei.

Existing land uses of the 552.01 acre site (see Figure 7) include coral mining, agricultural uses and a raceway park. Oahu Sugar Company (OSCo) currently leases a portion of the project area for sugar cane cultivation. According to OSCo maps, Field 004 encompasses an area of approximately 260 acres, 145 acres of which are in the amendment area. The OSCo lease expires in the year 1995. The Estate also uses approximately 10 acres of the land as a tree nursery. This site is located near the intersection of Kalaela Boulevard and Malakole Road. Coral mining operations are currently being performed by Hawaiian Cement for the manufacture of cement and concrete products. The Hawaiian Cement option area extends over approximately 267 acres in the northwest corner of the project area. The Hawaiian Cement agreement continues beyond the year 2000.

Hawaiian Raceway Park occupies approximately 66 acres of the southeast portion of the project area as well as a portion of the adjacent parcel owned by the United States government. The City and County of Honolulu approved Resolution 89-309 in June 1989 requesting the Chief Planning Officer to initiate a proposal to designate the Hawaii Raceway Park as a park on the Oahu Development Plan Map. Coincident with the existing lease, the city has set up a temporary program through 1991 to allow racing at the park. The Department of Parks and Recreation, City and County of Honolulu, has prepared a report (November 1989) which addresses a motor sports facility for the island of Oahu, e.g., what the facility may consist of, where the facility may be sited, and how such a facility may be financed and operated. The report identifies three candidate sites: Campbell Industrial Park, Kulaia, and Poamoho, as potentially suitable for development of a motor sports facility. Additionally, the study states "[F]urther study is needed to determine if even these three sites are appropriate for a commercially viable motor sports facility. If it develops that none of these sites is publicly acceptable, then the only other options are no Oahu motor sports facility or else a publicly-subsidized "user only" facility in a remote part of rural Oahu...". A Planning Commission public hearing on the redesignation of the Hawaii Raceway Park land as a "Publicly
Environmental Impact Statement

KAPOLEI BUSINESS-INDUSTRIAL PARK

Funded Park" on the Ewa Development Plan Public Facilities Map has been scheduled for April 18, 1990.

The State Department of Transportation, Harbors Division has prepared and submitted a Development Plan Amendment on 83.9 acres of adjoining Barbers Point Harbor land for Industrial expansion of the Harbor facilities. The DP application was accepted by the Department of General Planning (E/90-Z) for processing during the 1990 DP Annual Review. The area above the Oahu Railway & Land Company (O.R.& L.) right-of-way is not scheduled for amendment action at the present time, and remains designated Agriculture. This area is presently undergoing planning studies to determine the most appropriate use of the land.

An estimated 533 acres, of the total 552.09 acre project site, are being proposed for redesignation from Agriculture to Industrial. Of that number, 109.30 acres are being proposed for Maritime Industrial (56 acres of which are intended for future Barbers Point Harbor expansion) and 423.59 acres for Intensive Industrial. The request for Development Plan Amendment also includes redesignation of 19.2 acres from Agriculture to Commercial.

The project area to be called Kapolei Business-Industrial Park will play an important role in stimulating new business opportunities which, in turn, will produce new employment prospects for Ewa Plain residents.
DEVELOPMENT SUMMARY

Applicant: The Estate of James Campbell
Suite 300
828 Fort Street Mall
Honolulu, Hawaii 96813

Property Owner: The Estate of James Campbell
Suite 300
828 Fort Street Mall
Honolulu, Hawaii 96813

EIS Consultant: William E. Wanket, Inc.
Pacific Tower 660
1001 Bishop Street
Honolulu, Hawaii 96813

Accepting Authority: Department of General Planning
City and County of Honolulu
Municipal Office Building, 8th Floor
650 South King Street
Honolulu, Hawaii 96813

Proposed Action: Applicant requests the Department of General Planning to process proposed changes to the Ewa Development Plan Land Use Map. (See Figure 2)

Project Name: Kapolei Business-Industrial Park

Project Location: Ewa, Oahu, Hawaii (See Figure 1A)

Tax Map Key: 9-1-14: 2 (portion)
9-1-15: 1, 13, 16

Project Area: 552.1 acres

Existing Use: Agriculture (growing of sugarcane), coral mining, raceway park. (See Figure 7)

Proposed Uses: Mainly industrial with some commercial. (See Figure 2)

State Land Use District: Agriculture (See Figure 1B)

Development Plan Land Use Designation: Agriculture (See Figure 3)
Environmental Impact Statement
KAPOLEI BUSINESS-INDUSTRIAL PARK

Development Plan PF Designations: See Figure 4

Existing Zoning: AG-1 Restricted Agriculture and AG-2 General Agriculture (See Figure 5)

Proposed Zoning: I-2 Intensive Industrial, I-3 Waterfront Industrial and B-2 Community Business (see Figure 6)
Environmental Impact Statement
KAPOLEI BUSINESS-INDUSTRIAL PARK

SUMMARY OF BENEFICIAL IMPACTS

General Plan/Development Plan: The proposed Kapolei Business-Industrial Park is an essential link to the successful implementation of the Secondary Urban Center. Existing, planned and proposed developments in the SUC will be served by the industrial activities, and area residents will enjoy employment opportunities.

Barbers Point Harbor: Expanding the industrial area near the Harbor will encourage the development of ocean-related industries, contributing to the economic viability of Barbers Point Harbor.

Environmental: The project area is strategically located between the developing Barbers Point Harbor the existing industrial activities within Campbell Industrial Park, and the emerging City of Kapolei. Physical characteristics of the land are generally favorable for industrial use.

Flora/Fauna: No protected or endangered biota were found to inhabit the project area.

Socio-Economic: Business and industrial opportunities will be created encouraging the growth and diversification of Oahu’s economic base.

Fiscal: Real property taxes can be expected to rise as the land will be developed to "higher" use. Increased revenues from business income taxes, personal income taxes of employees, and general excise tax can be expected. Favorable to the public, as projected revenues are expected to exceed public expenditures.

- 6 -
### SUMMARY OF ADVERSE IMPACTS

<table>
<thead>
<tr>
<th>IMPACT</th>
<th>MITIGATING MEASURES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Loss of Agricultural Lands:</strong></td>
<td>The project area is partly under sugarcane cultivation by the Oahu Sugar Company (OSCo). Study prepared for this report indicates that the project is not expected to threaten the economic viability of OSCo nor the growth of diversified agriculture. The developer will coordinate the phasing of the project with OSCo to avoid unnecessarily disrupting final cultivation/harvesting.</td>
</tr>
<tr>
<td><strong>Traffic:</strong></td>
<td>Kualoa Boulevard will require improvement and widening, including signalization at certain intersections. A second access road to and from the industrial park will be required as well as the creation of new intersections. Further improvement will be necessary to accommodate the traffic beyond the study area. These improvements will be identified in the Ewa Region Highway Transportation Master Plan being prepared separate from this document. Employment opportunities and economic activity for area residents will help reduce adverse regional traffic impacts.</td>
</tr>
<tr>
<td>Increased vehicular traffic will be generated in areas on and offsite the project area including Palalai Interchange.</td>
<td><strong>Construction:</strong> The developer and its contractors will comply with local grading and subdivision ordinances, and with the regulations of the Department of Health.</td>
</tr>
</tbody>
</table>
Environmental Impact Statement
KAPOLEI BUSINESS-INDUSTRIAL PARK

Archaeological Resources:

Land development within the area could result in destruction of archaeological and paleontological resources in the area. Archaeological and paleontological resources were identified. Mitigative measures are proposed that will protect the resources for further research, identification, testing, data recovery, and/or preservation through acquisition by qualified parties.

Utilities:

Increased need for utility services, including city supplied water and sewer. A dual water system is proposed using potable water for domestic uses and nonpotable water for irrigation and other non-consumptive uses. Improvement plans will be coordinated with the Ewa Plain Water Development Corporation and other appropriate agencies.

Water, sewer and drainage plans must be approved by appropriate public agencies.

Services:

Increased need for public services such as police and fire facilities. An impact study on State and County finances indicates that the project will generate revenues exceeding expenditures. New fire station locations have been identified on the current DP Public Facilities Map. Additional police stations are in the planning process.

Air Quality - Vehicular:

Under "worst-case" conditions some of the State's 1-hour and 8-hour standards may be exceeded in certain "hot spots." Encouraging carpooling, mass transit use and implementation of an inspection/maintenance program could reduce vehicular emissions. Also, increasing highway capacity and encouraging use of public transportation would help reduce traffic-related adverse impacts. Air quality monitoring equipment is being purchased by the Estate of James Campbell and will be given to the State Department of Health.
Environmental Impact Statement

KAPOLEI BUSINESS-INDUSTRIAL PARK

Hazard – Slag Area:

An area of contaminant material exists on the property. A site remediation plan is under review and discussion with the Environmental Protection Agency (EPA) and the State Department of Health (DOH).

ALTERNATIVES CONSIDERED

In Chapter VIII, three (3) alternatives were considered to the proposed project: (1) No-Action; (2) Agricultural; and (3) Mixed Use. The first no-action alternative assumed that the land for the present time would remain in uses currently operating on the property: sugarcane production, coral mining, and racetrack park activities. The second considered the expansion of agricultural activities to include diversified agriculture, agricultural lot subdivision, and the development of other uses allowed in the AG-1 and AG-2 zoning districts. The third reviewed an industrial commercial mixed use concept for the area.

The findings of the alternatives considered support the project as the most viable and beneficial alternative for the property in light of the Secondary Urban Center concept of the General Plan, the economic growth objectives of Barbers Point Harbor, and the need for employment opportunities for residents of the area. However, the industrial-commercial mixed use alternative may have future application for portions of the property. This alternative, however, may require adjustments to the Land Use Ordinance which states "... This district (IMX-1 Industrial-Commercial Mixed Use District) is not intended for widespread application but only to those areas which have a history of mixing industrial uses with other uses..." [LUO Section 5.110].

UNRESOLVED ISSUES

The following are considered unresolved issues:

A. State Land Use Boundary

The project site is currently designated for Agriculture use by the State Land Use Commission. A petition for boundary amendment will be filed with the Commission to have the site designated to Urban. Until this petition is filed and the land use change to Urban is granted, the project site will remain classified as Agriculture. (See Figure 1B)

B. Regional Traffic

Regional traffic and the necessary improvements are unresolved issues at this time. Efforts are underway between Campbell Estate, Ewa region developers, and the state Department of Transportation to develop a Ewa Region Transportation Master Plan that will identify needed roadway improvements, timing of the improve-
ments, who should pay for the improvements, and what their fair share should be. The Master Plan involves State and County transportation and planning agencies. Tentative schedules for developing traffic forecasts call for results within four months.

C. Slag Area

An area of about 4.5 acres in size (see Figure 7) was used by Hawaiian Western Steel (HWS) as a waste pile consisting primarily of steel slag, skulls, scale, scrubber solids and broken electrodes, and baghouse dust. The baghouse dust is the primary hazardous constituent and represents less than ten percent of the waste pile. HWS has proposed a site remediation plan that calls for consolidating the waste pile under a cap of natural coral material. However, the Environmental Protection Agency and the State Department of Health has the matter under review and a process is underway to determine the most appropriate method of mitigation.

D. Regional Drainage System

A large drainage channel will traverse the subject property to serve a drainage basin of some 2,400 acres, including the project area, which will discharge to the ocean. Because of its service area, and the fact that it will encroach (outside the boundaries of the project area) into the conservation district (shoreline) and be within the Shoreline Management Area (makai of Malakole Road), a separate supplemental Environmental Impact Statement will be prepared to thoroughly address water quality issues and marine biota.

E. Wastewater Disposal

Pursuant to earlier meetings and discussions with the State Department of Health, it was determined that a temporary onsite treatment facility would be allowed should the development precede the anticipated completion of the Honolulu WWTP expansion. As a result, a temporary treatment facility was placed on the Ewa Development Plan Public Facilities Map.

Subsequently, in comments received from the State Department of Health (refer to Chapter XV), the Applicant was advised that the development should only proceed on the basis that wastewater will be treated at the Honolulu WWTP. In follow-up conversations with the Wastewater Branch of the State Department of Health (DOH), the Applicant was advised that DOH is in the process of formulating a policy toward the applicability of private treatment plants in the Ewa Plain. This policy would effect not only the proposed development, but all projects in the Ewa Plain, including the housing projects of the State of Hawaii and the City and County of Honolulu. For this reason, the issue of wastewater
Environmental Impact Statement

**KAPOLEI BUSINESS-INDUSTRIAL PARK**

disposal would be considered unresolved at this time. Coordination with the DOH will be continued.

**COMPATIBILITY WITH LAND USE PLANS AND POLICIES**

A thorough discussion of the relationship of the proposed development to the land use plans and policies is presented in Chapter VI. The proposed development is consistent with all the relevant public goals, objectives, policies, plans and controls, with the exception of the necessary approvals for a State Land Use Boundary Change, City and County of Honolulu Development Plan Amendment and change in zoning as listed below.

**NECESSARY PERMITS AND APPROVALS**

A number of permits and approvals must be secured before development of the project area can begin. Major permits and approvals still outstanding include:

<table>
<thead>
<tr>
<th>PERMIT/APPROVAL</th>
<th>APPROVING AUTHORITY</th>
<th>STATUS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land Use District Boundary Amendment</td>
<td>Land Use Commission</td>
<td>Petition to be filed following approval of DP Amendment</td>
</tr>
<tr>
<td>Development Plan Land Use Amendment</td>
<td>City Council</td>
<td>In process</td>
</tr>
<tr>
<td>Development Plan Public Facility Map Amendment Zone Change</td>
<td>City Council</td>
<td>Application to be filed following approval of DP Amendment</td>
</tr>
<tr>
<td>EIS</td>
<td>Department of General Planning</td>
<td>Will be filed following approval of DP Amendment</td>
</tr>
<tr>
<td>Water Master Plan</td>
<td>Board of Water Supply</td>
<td>In process</td>
</tr>
<tr>
<td>Subdivision</td>
<td>Department of Land Utilization</td>
<td>Application to be filed following zone change</td>
</tr>
<tr>
<td>Grading / Drainage Wastewater</td>
<td>Department of Public Works</td>
<td>To be submitted during subdivision process</td>
</tr>
<tr>
<td>Building Permit</td>
<td>Building Department</td>
<td>To be filed following subdivision process</td>
</tr>
<tr>
<td>Major Drainage Channel</td>
<td>Army Corp of Engineers &amp; City Council (SMA)</td>
<td>Supplemental EIS being prepared</td>
</tr>
</tbody>
</table>

- 11 -
I. PROJECT DESCRIPTION

A. LOCATION AND SIZE

The Project area, in general, is bounded by the Oahu Railway & Land Company (O. R. & L) right-of-way to the north, Makakole Road to the south, the Barbers Point Harbor and Ko Olina to the west, and Barbers Point Naval Air Station and Campbell Industrial Park to the east. Limits of the project site and its relationship to adjoining uses are illustrated on Figure 1A.

B. LAND USE PLAN

The proposed project, the land use plan of which is illustrated on Figure 2, would comprise the following land use components:

<table>
<thead>
<tr>
<th>Land Use</th>
<th>Acres</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maritime Industrial</td>
<td>109.30</td>
</tr>
<tr>
<td>Intensive Industrial</td>
<td>423.59</td>
</tr>
<tr>
<td>Commercial</td>
<td>19.20</td>
</tr>
<tr>
<td>TOTAL</td>
<td>552.09</td>
</tr>
</tbody>
</table>

The demand, absorption, and employment estimates for the proposed industrial and commercial components of the project were performed by John Zapotocky. For a summary of the assessment, please refer to Chapter II. The full market assessment is included as Appendix M. Following is an overview of the land use proposals.

1. Maritime Industrial

Approximately 56 acres (over 50 percent) of the total 109.30 acres proposed for maritime use are intended to be acquired by the State of Hawaii, through agreements made with the James Campbell Estate, for the purposes of expanding Barbers Point Harbor. The remaining acreage will be developed to further support the activities generated by the harbor facilities.

The 56-acre parcel is situated east of the existing Barbers Point Harbor, contiguous to an 83.9 acre site that the State Department of Transportation, Harbors Division has requested be designated Industrial on the Ewa Development Plan (90/E-2).

The lands proposed for maritime industrial are intended to be developed under I-3 Waterfront Industrial District of the Land Use Ordinance. This proposed addition would result in an I-3 boundary which would be consistent with providing a concentration of waterfront activities surrounding the Barbers Point Harbor.
Environmental Impact Statement

KAPOLEI BUSINESS-INDUSTRIAL PARK

Key sources of future demand for I-3 lands in Ewa have been assessed to include:

- Major changes in the commercial environment in west Oahu due to the implementation of the Ewa Master Plan, currently being prepared.
- Displacement due to redevelopment of the Honolulu waterfront.
- Saturation of Honolulu Harbor I-3 lands.
- Pent-up demand for Barbers Point Harbor.
- Growth of Foreign Trade Zone activity.
- Need for vacant I-3 lands for future development.

Maritime industrial activity is expected to employ approximately 3.5 persons per acre.

2. Intensive Industrial

The City and County of Honolulu’s General Plan reflects a commitment to ensuring a major population shift westward by the year 2010. Over the next 20 years Ewa is expected to grow three times faster than the Primary Urban Center (PUC), with more than half of the resident population growth occurring in the Ewa DP area. Population growth is expected to translate into job growth. The impact of job growth on demand for industrial land on Oahu was quantified based on the following factors: Growth in major industrial job categories, such as manufacturing, construction, transportation and warehousing. Employment per acre factor by job category was also considered.

The character of Kapolei Business-Industrial Park will be complementary as opposed to similar to the existing James Campbell Industrial Park. Projected land uses for I-2 lands at Kapolei Business-Industrial Park include: Light manufacturing and warehousing in proportions similar to other industrial parks on Oahu. Service businesses that would support the population in Ewa, and innovative land uses within the current Land Use Ordinance parameters for I-2, such as multi-franchise auto dealerships, car service centers, auto storage areas and self (or "mini") storage facilities.

Areas within the Kapolei Business-Industrial Park which are expected to contain light industrial and service business are expected to have an employment rate to approximate the average for Oahu.
industrial land (excluding sugar and pineapple production). (See Figure 19 of Appendix M).

3. Commercial

This request for Development Plan amendment includes redesignation of 19.2 acres of land from Agriculture to Commercial. Despite the relatively small acreage of this parcel its strategic location near the mouth of Barbers Point Harbor and adjacent to the Ko Olina development lends significance to this request. The need for supportive commercial space for tenants of the nearby JCIP and proposed Kapolei Business-Industrial Park has also been considered.

The location of the commercial parcel will play a major role in future usage of the land. Likely uses include:

- Support of Waterfront Industrial (I-3) uses.
- Potential for a harbor/marina-view retail and restaurant complex.
- Service to the adjacent Ko Olina hotel and residential community.

Of the proposed 19.2 acre commercial parcel, absorption of 15 acres is anticipated by 2010. This will result in approximately four additional acres available for further commercial development after 2010.

C. PUBLIC FACILITIES

In summary, improvements necessary to accommodate the proposed land use amendment include a drainage channel, access roads to the project site and the Barbers Point Harbor, wastewater main collection lines, sewage pump station, and relief sewer along railroad right-of-way, and main water lines and nonpotable water source and storage. Subsequent to the approval of the Development Plan Land Use Amendment, detailed documentation on the proposed facilities will be prepared in accordance with the requirements of the Department of General Planning for processing Public Facility Map Amendments.

Following is a brief description of the facility improvements for the project. Please refer to appropriate Sections of this document under Chapter V for additional discussion, as well as Appendices A and L.
1. **Water**  
(See Appendix A)

The potable and nonpotable mgd (average flow) requirements of the project site are computed according to the Board of Water Supply Standards as follows:

<table>
<thead>
<tr>
<th>POTABLE WATER (MGD)</th>
<th>NONPOTABLE WATER (MGD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average 0.78</td>
<td>Max 1.18</td>
</tr>
<tr>
<td></td>
<td>Average 1.87</td>
</tr>
</tbody>
</table>

Improvements proposed are:

Implement a dual water system which will use potable water for domestic uses and nonpotable water for irrigation and other nonconsumptive uses. Future water system improvements will be governed by development schedules of the proposed projects and will be coordinated by the Ewa Plain Water Development Corporation and other appropriate agencies. A water master plan will be prepared for the project and will be submitted to the Board of Water Supply for review and approval.

2. **Wastewater**  
(See Appendix A)

Average daily wastewater flow generated by the development of the project site is anticipated at approximately 2.2 mgd with peak flows of 6.8 mgd.

Wastewater from the development area is proposed to be discharged through an underground collection system to the Honolulu Wastewater Treatment Plant (WWTP). The Honolulu WWTP however requires expansion to serve the entire project area. The Department of Health is currently in the process of formulating a policy toward the applicability of private treatment plants to serve projects in the Ewa Plain pending completion of the expansion plans. A temporary private onsite treatment facility is shown on the Ewa Development Plan Public Facilities Map.

The implementation schedule of the project is being coordinated with the Division of Wastewater Management. All improvements will be designed to current City and County Department of Public Works wastewater design standards.
3. Solid Waste and Disposal
(See Appendix A)

The proposed project will generate additional solid waste from the area. Private refuse collectors are expected to service the development.

The City and County of Honolulu is currently in the process of establishing a new landfill site in Waimanalo Gulch and development of the H-POWER waste energy recovery facility is underway. The H-POWER facility is expected to accommodate most of Oahu's solid waste.

4. Drainage/Grading
(See Appendix A)

The project area is designated as Zone D on the Flood Insurance Rate Map (FIRM), an area of undetermined, but possible, flood hazards (See Figure 10). The designation does not require regulation under the Flood Hazard District (Ordinance No. 80-62) of the LUC. Estimated storm runoff for the project area under developed conditions ranges from 1,141 cfs for a 10-year, 1-hour storm to 1,750 cfs for a 100-year, 1-hour storm.

The major element of proposed drainage improvements to serve the project site as well as adjacent developments is a large drainage channel running through the Kapolei Business-Industrial Park site from the railroad right-of-way to the ocean. An underground onsite drainage system of catch basins/manholes and pipe culverts, with conveyance to the proposed drainage channel is intended to alleviate current flooding problems and prevent flooding resulting from the proposed development.

The drainage channel will be sized to accommodate runoff from the entire watershed based on the City and County of Honolulu's Storm Drainage Standards. Studies are currently being conducted to prepare for the various permits that are required for construction of the drainage way, including the preparation of a Supplemental Environmental Impact Statement that will fully address the potential impacts of the drainageway to the coastal water quality and marine biota.

Grading will be limited to not more than 15 consecutive acres at a time and seeding half of the area will reduce estimated soil erosion potential for the site by 53 percent to 5,375 tons per year. See Chapter V, Soil Erosion for additional discussion and mitigative measures.
5. Electrical and Communications
   (See Appendix A)

   The proposed development will place additional demands on the utility systems. Based on information provided by HECO, the projected load requirements for the project area are estimated at 55.2 to 82.8 MVA. (For planning purposes HECO has indicated that electrical unit loads for industrial developments may range from 100 KVA/acre to 150 KVA/acre.)

   Preliminary consultations with HECO and HawTel indicate that service can be provided to the project.

6. Circulation
   (See Appendix L)

   Kalaeloa Boulevard, a divided four-lane highway, with two lanes in each direction, is, at present, the only access to the existing James Campbell Industrial Park and Barbers Point Harbor. The two-lane Malakole Road intersects Kalaeloa Boulevard in a stop-controlled cross intersection and serves as the access into the Barbers Point Harbor area.

   A two-lane second access road to and from the industrial park is being planned with connection to either the proposed Kapolei Parkway or alternatively to Kalaeloa Boulevard. Phased improvements such as signalizing intersections and adding lanes to existing roadways to accommodate the anticipated increase in traffic are being recommended. The Ewa Region Highway Transportation Master Plan, an ongoing study, will address improvements necessary to accommodate offsite regional traffic. It has been estimated (Engineering Concepts, Inc.) that approximately 44 acres will be needed for circulation in the project area.

   Figure 16 illustrates recommended roadway and laneage improvements associated with the project area.

D. PHASING PLAN/ESTIMATED COSTS

   Figure 14 shows a preliminary phasing plan of the area under consideration for a DP Amendment, as well as areas adjoining the project site that are either DPeD and/or zoned for Industrial. Areas to be developed by the State of Hawaii (56 acres to be acquired by the State and the 84 acre DP Amendment 90/E-2) are not shown.

   The Park is expected to be developed in increments of 50-80 acres, beginning in 1992, with full occupancy expected by the year 2030. Although development of the amendment area depicted on the preliminary phasing plan begins in year 2000, marketing conditions will determine the actual phasing. According to the Market Assessment by John Zapotocky
Environmental Impact Statement
KAPOLEI BUSINESS-INDUSTRIAL PARK

(Appendix M), the amendment area to the year 2010 can be expected to have the following absorption schedule:

<table>
<thead>
<tr>
<th>YEAR</th>
<th>INDUSTRIAL</th>
<th>COMMERCIAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1992 to 1995</td>
<td>43.85</td>
<td></td>
</tr>
<tr>
<td>1995 to 2000</td>
<td>52.62</td>
<td>5</td>
</tr>
<tr>
<td>2000 to 2005</td>
<td>67.23</td>
<td>5</td>
</tr>
<tr>
<td>2005 to 2010</td>
<td>81.85</td>
<td>5</td>
</tr>
</tbody>
</table>

Estimated project costs amount to $75,000,000. These figures are intended to determine an order of magnitude for roadway and infrastructure costs. With the exception of possible utility requirements by Hawaiian Telephone and Hawaiian Electric, no public funds are deemed to be involved.

E. CHANGES IN LAND USE DESIGNATIONS REQUIRED TO IMPLEMENT THE PROJECT

Amendments to the State Land Use District, Development Plan, and zoning will be required.

STATE LAND USE DISTRICT

Existing: Agriculture
Proposed: Urban

DEVELOPMENT PLAN

Existing: Agriculture
Proposed: Industrial, Commercial

ZONING

Existing: AG-1 Restricted Agriculture and AG-2 General Agriculture District
Proposed: I-3 Maritime Industrial, I-2 Intensive Industrial and B-2 Commercial
II. FEASIBILITY
(See Appendix M)

A Market Assessment for the project was conducted by John Zapotocky. The purposes of the Assessment were to:

☐ Examine the major economic issues and assumptions underlying the proposal;
☐ Analyze the demand for the proposed redesignated land;
☐ Analyze demand versus projected supply of land;
☐ Discuss creative land use alternatives for development of Kapolei Business-Industrial Park acreage; and
☐ Project the rate of future absorption of Industrial (I-2 and I-3) and Commercial parcels.

Following is a summary of the Market Assessment Report.

A. MARKET ANALYSIS

The Estate of James Campbell is requesting an amendment to the Ewa Development Plan which would change the designation of 552.09 acres of land now designated for agriculture to 532.89 acres designated Industrial and 19.2 acres designated commercial.

There are five major reasons for requesting the change in designation at this time:

(1) Major land use changes called for in the Ewa Master Plan for lands owned by the Estate of James Campbell have been completed and physical implementation of the actual development is well underway at the three residential communities of West Loch Estates, Ewa Gentry and The Kapolei Villages. Development of infrastructure for the Ko Olina Resort has been underway for two years. In October 1989, a major hotel project was announced for Ko Olina. Announcement of other major hotel and condominium projects are expected in the near future. The Kapolei Shopping Center, the first major commercial development in Kapolei, has experienced an exceptionally strong reception from commercial tenants with over 95% of the space committed prior to ground breaking. Thus the emergence of the Ewa area as the dominant growth area for the county during the next twenty years in accordance with city and state planning policies is now assured.

(2) The James Campbell Industrial Park is 97% leased with essentially all of the remaining acreage committed for development.
(3) During the past two years there has been a shortage of industrial space on the Island of Oahu with vacancy rates for industrial space currently estimated at less than two percent (2%) vs. an ideal vacancy rate at between 5% and 10%.

(4) Over time Hawaii’s economy has been continuously evolving from the 1950’s when its was based primarily on agriculture and military expenditures through the 1970’s when tourism emerged as the dominant industry until today when tourism is clearly the dominant economic activity in the state’s economy. This transition as well as the nationwide change from an industrial based to service based economy has resulted in a change in the types of demand for industrial land. At the same time there is an increasing recognition on the part of government planners and industrial land developers of the need to maintain an adequate supply of industrial land for all types of industrial land uses. This is especially critical as primary urban center land values increase due to alternative uses putting pressure on existing industrial land users within the Honolulu to Pearl City corridor to find alternate locations.

(5) The Series M-K Economic Projections adopted officially by the Department of Business and Economic Development in November 1988, while indicating a relative decline in traditional industrial jobs vis a vis total jobs, project continuous absolute growth. Non-hotel service jobs, another potential component of industrial land demand, continue to grow in both absolute and relative terms.

B. FUTURE DEMAND

The Kapolei Business-Industrial Park is being proposed by the Estate of James Campbell at this time to respond to the needs and opportunities described above in a comprehensive rather than piecemeal manner.

The proposed Kapolei Business-Industrial Park responds to the above challenges in a number of ways:

(1) It accommodates future industrial growth by providing additional acreage for demand generated by growth in jobs and displacement of existing businesses while providing an adequate vacancy factor.

(2) It accommodates the need to provide land for critical harbor functions as well as the overall spectrum of industrial development.

(3) It provides long range opportunities for the location of both heavy and light industrial uses.
Environmental Impact Statement
KAPOLEI BUSINESS-INDUSTRIAL PARK

(4) It proposes a land use pattern within the park which maximizes compatibility of existing and planned industrial uses within the Kapolei Business Industrial Park and the surrounding harbor, military, commercial, residential and resort land uses.

1. Demand for I-2 Land

More specifically the report demonstrates that island wide there is a need for 1,194 acres of I-2 land on Oahu and 672 acres in Ewa by 2010 composed of the following:

<table>
<thead>
<tr>
<th></th>
<th>OAHU</th>
<th>EWA</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Due to job growth</td>
<td>543</td>
<td>271</td>
</tr>
<tr>
<td>2. Due to relocation</td>
<td>222</td>
<td>122</td>
</tr>
<tr>
<td>3. Need for vacant</td>
<td>429</td>
<td>272</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1,194</td>
<td>672</td>
</tr>
</tbody>
</table>

2. Demand for I-3 Land

The report estimates a mid range demand for I-3 land at 277 acres in Ewa by the year 2010 and the report identifies potential demand for I-3 land from six sources. However, the total amount of I-3 proposed for the Barbers Point Harbor, including the 109.30 acres of the proposed request would result in approximately 75% of the total I-3 area surrounding the existing Honolulu Harbor, Oahu's only major commercial port. The fact that the state owns, controls or has expressed interest in 60% of this land for primary harbor functions argues strongly that additional harbor I-3 lands should be made available. Should the state control the bulk of the Barbers Point Harbor industrial lands in order to meet its long range plans for harbor expansion, little land would be available for the needs of private individuals or companies requiring the land for business purposes. The I-3 use proposed in this application would be for 109.30 acres of I-3 of which the State has already expressed an interest in 56.5 acres. Thus the net expansion of private I-3 acreage would be 53.03 acres.

Demand for I-3 lands has been estimated by the consultant to range between 97 acres and 427 acres. Medium and high acreage projections will depend on the implementation of the proposed Honolulu Harbor Redevelopment master plan and the success of the state's planned acquisition of the Kapalama Military Reservation lands for Honolulu Harbor's expansion. For purposes of this report absorption of I-3 acreage within the Kapolei Business-Industrial Park is estimated at approximately 57 acres through 2010.
The proposed addition of I-3 land would result in I-3 boundaries which would be consistent with providing a concentration of I-3 lands surrounding the Barbers Point Harbor.

3. **Demand for Commercial Land**

Demand for the proposed 19.2 acre commercial designation will come from two primary sources. The approximately 13,000 persons who will ultimately work within the JCIP and proposed Kapolei Business-Industrial Park and the commercial support activity for the harbor and the park tenants are the primary sources of demand. The location of the proposed commercial land between the Barbers Point Harbor and the Ko Olina Marina suggest the site will have excellent visual amenities which will enhance its value in attracting commercial tenants such as restaurants and other shops in a theme commercial center. New commercial development would attract patrons from the Ewa community in general as well as the Ko Olina Resort Community which is adjacent. The consultants have estimated 15 acres will be absorbed prior to 2010 with the remaining 4.2 acres available for expansion at a later date.

C. **ABSORPTION OF ACREAGE**

Based on the above estimates of demand the consultants have estimated the absorption of acreage within the proposed Kapolei Business-Industrial Park. In addition, employment and building square footage was estimated based on the acreage absorptions. (See Figures 15 through 22, Appendix M for detailed analysis.)

Estimates thru 2010 indicate that 420 acres of industrial land (363 acres of (l-2) and 57 acres of (l-3) would be absorbed within the proposed Kapolei Business-Industrial Park. **NOTE:** The proposed park would consist of 931 acres of industrial land including 379 acres of industrial land already approved for development. In addition, 15 acres of commercial land would be absorbed.

D. **EMPLOYMENT/BUILDING SQUARE FOOTAGE ESTIMATES**

1. Through 2010 approximately 4,751 jobs would be created at the park, while ultimately 9,748 jobs would be created. This would be in addition to the estimated 3,000 persons already working at the James Campbell Industrial Park.

2. Building square footage estimates provided in a low and high range indicated 2.1 million to 2.9 million square feet through 2010 respectively, and 4.9 million to 6.5 million square feet upon completion of development.
E. LABOR AVAILABILITY

Labor availability in the Ewa area is excellent now, and should continue to be so for the foreseeable future, given that most of new housing planned for Oahu during the next 20-years will be in the Ewa, Central Oahu and Waianae areas. While the labor market may tighten on an Oahu-wide basis, many factors will tend to mitigate this situation, including higher wages, increased and more attractive benefits, targeting non-traditional sources of employees, making work more convenient for employees, technological advances and employment at more than one job (refer to Chapter XV, Response Letter to Office of State Planning for a discussion on these factors and other issues relating to labor availability).

F. RELATIONSHIP OF PROJECT TO THE REGION

The project is supportive of and linked to the region’s second city concept. However, demand for the Kapolei Business-Industrial Park is fueled primarily by long term growth in Oahu’s demand for industrial land as well as the competition by higher (commercial/residential) land uses in areas in transition which currently contain a high proportion of industrial areas, such as Kakaako, Iwilei and the Airport. The proposed development, while somewhat sensitive to regional growth factors, is primarily responsive to islandwide demand for industrial land, and only dependent on the success of other regional development to a limited degree (refer to Chapter XV, Response Letter to Office of State Planning for more discussion).

G. SUMMARY

There is a demonstrated need for additional industrial land in the Ewa development plan area thru the year 2010. The proposed development plan amendment consisting of 552.01 acres of industrial land and 19 acres of support commercial will insure the availability of adequate industrial land for Oahu’s vital industrial sector and for new businesses generated by the projected rapid population growth in the Ewa area as well as land for existing industrial businesses which will be relocated from the Primary Urban Center. Land is also being set aside to meet the projected needs of the Barbers Point Harbor, Oahu’s only alternative commercial harbor. The Kapolei Business-Industrial Park proposal anticipates and responds to long-term needs for an adequate supply of industrial land of various types as well as changing use patterns. In addition, it proposes to do so in a manner consistent with responsible planning with care taken to insure the most compatible relationships of uses within the Kapolei Business-Industrial Park and with surrounding land uses.
Environmental Impact Statement  
KAPOLEI BUSINESS-INDUSTRIAL PARK

III. PHYSICAL ENVIRONMENT ASSESSMENT

This Chapter focuses on the physical characteristics of the existing environment of the project site, identifies the probable impacts on the physical environment associated with the proposed development and, where appropriate, suggests mitigative measures to offset adverse conditions on the environment.

In reviewing this Chapter, the public is encouraged to refer to the following reports in the Appendix, which have been the major source for much of the information that follows:

<table>
<thead>
<tr>
<th>APPENDIX</th>
<th>REPORT</th>
<th>PREPARER</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Ewa, Oahu, Hawaii</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>Botanical Survey Campbell Estate Commercial-Industrial Project</td>
<td>Char and Associates</td>
</tr>
<tr>
<td></td>
<td>Ewa District, Island of Oahu</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>Campbell Drainage Channel</td>
<td>Char and Associates</td>
</tr>
<tr>
<td></td>
<td>Ewa District, Island of Oahu</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>Survey of the Avifauna and Feral Mammals at the Proposed Campbell</td>
<td>Phillip L. Bruner</td>
</tr>
<tr>
<td></td>
<td>Commercial-Industrial Site, Ewa Oahu</td>
<td></td>
</tr>
<tr>
<td>E</td>
<td>An Archaeological Assessment for the Proposed Kapolei Business-Industrial Park Honolulu, 'Ewa, Oahu</td>
<td>Cultural Surveys Hawaii</td>
</tr>
<tr>
<td>F</td>
<td>Noise Impact Assessment, Proposed Campbell Commercial-Industrial</td>
<td>Darby Associates</td>
</tr>
<tr>
<td></td>
<td>Center, Oahu</td>
<td></td>
</tr>
<tr>
<td>G</td>
<td>Visual Assessment</td>
<td>Michael S. Chu</td>
</tr>
<tr>
<td>H</td>
<td>Air Quality Impact Reports for Kapolei Business-Industrial Park</td>
<td>J.W. Morrow</td>
</tr>
</tbody>
</table>

A. TOPOGRAPHY/GEOLOGY  
(See Appendix A)

The natural topography of the amendment area is flat, with mounds and depressions scattered over the site (See Figure 8). Elevations range from approximately 5 feet mean sea level (MSL) near the intersection of
Environmental Impact Statement

KAPOLEI BUSINESS-INDUSTRIAL PARK

Kahului Boulevard and Malakole Road to approximately 75 MSL near the northwest corner of the amendment area. Slopes of less than 0.5 percent to 5 percent are found on the site. In general, the amendment area slopes from the railroad-right-of-way to Malakole Road, with an average slope of approximately 1 percent.

A large stockpile from the excavation of the Barbers Point Harbor occupies an area of approximately 105 acres in the southwest corner of the property. Approximately 50 acres of the stockpile is contained in the amendment area.

The offsite watershed exhibits varying terrain, extending from the railroad right-of-way to the crest of the Waianae Range at an elevation of approximately 2,400 feet MSL. The area immediately north of the site up to the H-1 freeway is currently planted in sugar cane and is relatively flat, with slopes similar to those found in the James Campbell Industrial Park site. The topography of the watershed area above the freeway ranges from a gently sloping area (1 to 10 percent) adjacent to the freeway to steep slopes in excess of 50 percent along the gulches. Several plateaus with slopes ranging from 5 to 25 percent are located in the upper watershed area. The area above the freeway is currently covered with grass, scrub brush, and trees, with bare areas of rock and pockets or erosion also evident.

Impact

The entire site will be eventually graded in increments of not more than 15 consecutive acres at a time. Expected impacts from grading include:

☐ Dust from grading operations.
☐ Exposed soil subject to wind and rainfall erosion.

Any impacts will be mitigated to acceptable levels described below.

No scenic or geological landmarks will be affected.

Mitigative Measures

Dust generation and soil erosion will be minimized by compliance with the city's grading ordinance (Chapter 23, Revised Ordinances of Honolulu). Standard measures to include dust control, temporary grassing, phasing of construction, etc. shall be employed to minimize both visual and environmental impacts. See Chapter V, Soil Erosion, for additional discussion and mitigative measures. All requirements of Title 11, Chapter 26, paragraph 35 (Rodents; demolishing of structure and clearing of vacant sites and vacant lots) will be strictly adhered to.
Environmental Impact Statement

KAPOLEI BUSINESS-INDUSTRIAL PARK

B. SOIL CHARACTERISTICS
(See Appendix A and J)

A variety of soil types exists on the project site as classified by the U.S. Department of Soil Conservation Service (see Figure 9). Table 1 below shows the approximate acreage for each soil type, possible agricultural uses, and two soil ratings (SCS and LESA).

Coral or cemented calcareous sand exists with a thin layer of friable red soil material in cracks, crevices, and depressions (Coral Outcrop [CR]) is the predominate soil type and comprises 86 percent of the project area. The soil is poorly suited for agriculture, although sugarcane is being grown on a portion of the coral outcrop which has been covered with topsoil. Suitable agricultural activities associated with the remaining acreage include sugarcane, truck crops, and pasture.

Table 1

PROPOSED KAPOLEI BUSINESS-INDUSTRIAL PARK: SOIL TYPES, ACREAGE, AGRICULTURAL USES, AND SCS AND LESA RATINGS

<table>
<thead>
<tr>
<th>Soil Type</th>
<th>Acreage</th>
<th>Agriculture Uses</th>
<th>SCS Rating</th>
<th>LESA Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>CR</td>
<td>472</td>
<td>None</td>
<td>VIIIs</td>
<td>12</td>
</tr>
<tr>
<td>MnC</td>
<td>73</td>
<td>Sugarcane, Truck Crops, Pasture</td>
<td>III</td>
<td>66</td>
</tr>
<tr>
<td>EmA</td>
<td>7</td>
<td>Sugarcane, Truck Crops, Pasture</td>
<td>II</td>
<td>74</td>
</tr>
</tbody>
</table>

1. Assuming that the soils are irrigated, except for CR which is coral outcrop.


Ewa silty clay loam, moderately shallow, 0 to 2 percent slopes (EmA) is found on alluvial fans and terraces. The surface layer is dark reddish-brown silty clay loam about 18 inches thick. Subsoil is about 42 inches thick and is dark reddish-brown and dark-red silty clay loam. Substratum is coral limestone, sand, or gravelly alluvium. The soil is natural
Environmental Impact Statement
KAPOLEI BUSINESS-INDUSTRIAL PARK

with moderate permeability. Runoff is slow and the erosion hazard is slight.

Honouliuli clay, 0 to 2 percent slopes (HxA) occurs in low lands along coastal plains. The soil is dark reddish brown, very sticky, and very plastic throughout. The surface layer is about 15 inches. The soil is neutral to slightly alkaline with moderate permeability. Runoff is slow and erosion hazard is slight.

Mamala stony silty clay loam, 0 to 12 percent slopes (MnC) is a dark reddish-brown stony silty clay loam with a surface layer of about 6 inches thick. The subsoil is a dark reddish-brown silty clay loam about 11 inches thick.

The soils within the project area have been rated in terms of four classification systems commonly used in Hawaii:

1) Land Capability Grouping,
2) Agricultural Lands of Importance to the State of Hawaii,
3) Overall Productivity Rating, and
4) Proposed Land Evaluation and Site Assessment.

Most of the soils in the proposed development are poor and, correspondingly, most of the area is not rated in the ALISH classification system. However, the area that has been planted in sugarcane has soils that are rated as Other.

LSB: B (14 percent), C (21 percent), E (65 percent)
SCS: VIIIa (86 percent), III (13 percent), II (1 percent)

Subclassification "s" indicates that the limitation is due to stoniness, unfavorable texture, shallowness, or low water-holding capacity.

The Land Evaluation and Site Assessment (LESA) Commission developed a rating system to synthesize these various classification systems for agricultural suitability. If the LESA classification approach were applied to the proposed site, about 14 percent of the designated lands would be termed "important agricultural lands" (IAL), which would include all lands having a LESA rating of 66 or higher, out of a possible total of 100. The ratings for each soil type are shown in Table 1. These soil-rating systems suggest that about 15 percent of the project site is comprised of good but not high quality soils; 85 percent of the soils are considered poorly suited for agriculture.

For further discussion on the agricultural suitability, please refer to Appendix J, Proposed Kapolei Business-Industrial Park: Impact on Agriculture (Decision Analysts Hawaii).
Environmental Impact Statement
KAPOLEI BUSINESS-INDUSTRIAL PARK

Impact

The impacts of the project on soils would likely be erosion and indefinite loss of agricultural lands.

Erosion

Erosion could result from clearing, grubbing and future construction. After construction is completed, however, and landscaping and vegetative plantings have been replaced, it is expected that the level of erosion will decrease. See Chapter V, Soil Erosion for discussion on soil erosion impacts and mitigative measures.

Loss of Agricultural Lands

Agricultural soils will be lost as a consequence of the proposed development. See Section IV. B. and Appendix J for discussion of the project’s impact on Oahu Sugar Company, diversified agriculture, and on the agricultural policies of the State.

Mitigation Measures

Findings from soils investigations will be used in developing future construction plans. These plans will be reviewed and approved by various public agencies as part of the subdivision approval and building permit process.

The loss of agricultural lands is an unavoidable impact of the proposed project. OSCo currently leases approximately 145 acres of the project area for sugar cane cultivation. This lease is scheduled to expire in 1995. The acceptability of this impact is a policy determination that must balance between agriculture and development. In the longer term, the site for the proposed development will become isolated from the rest of the plantation as a result of other proposed developments. If the project area were to remain with OSCo, it would become a "remnant" property of the plantation, and the fields would likely be fallowed. For a complete discussion of the agricultural issues see Appendix J. A summary of these issues is also found in Section IV. B.

C. FLORA

Two Botanical Surveys of the project area (Char and Associates, August 1989, see Appendices B and C) were conducted. Improvements are planned for an existing drainage that services the area near the Barbers Point Harbor and the James Campbell Industrial Park and this area has been separately surveyed. The reports are attached as Appendices B & C and are titled Campbell Estate Commercial-Industrial Project 'Ewa District,
Environmental Impact Statement

KAPOLEI BUSINESS-INDUSTRIAL PARK

Island of O'ahu and Campbell Drainage Channel 'Ewa District, Island of O'ahu and are summarized and appended in that order.

Prior to undertaking the walk-through fields surveys, topographic maps, aerial photographs and literature pertinent to the project site were examined to determine access, vegetation patterns, terrain characteristics, and potential logistical and technical problems.

Campbell Estate Commercial-Industrial Project

During the survey, three major vegetation types were recognized on the subject property. Actively cultivated sugar cane fields along with the weedy species associated with agricultural lands covered more than 60% of the site. Uncultivated areas were occupied by kiawe forests and abandoned sugar cane fields.

A total of ninety-five vascular plant species was found, of which eighty-four (88.5%) were introduced, two (2%) were originally of Polynesian introduction and nine (9.5%) were native. None of the natives are considered threatened or endangered species.

Impact

The sites proposed for development contain little of botanical interest or concern as introduced plants are the dominant components of the vegetation. Almost all of the site appears to have been disturbed to some degree at one time or another.

Mitigation Measures

None necessary as there are no adverse impacts.

Campbell Drainage Channel

The proposed improvements to the existing drainage channel will affect vegetation dominated almost exclusively by introduced species. California grass, koa-haole, Guinea grass, buffel grass, and an assortment of other weedy plants occur where the drainage crosses agricultural lands mauka of Malakole Road. Near the coast, makai of Malakole Road, the drainage crosses an open kiawe forest with large areas covered by pickleweed. Soil salinity in this area is high.

Of a total of sixty-two plant species inventories, fifty-five (89%) were introduced or alien; six (10%) were indigenous, i.e., native to the islands and also elsewhere; and one (1%) is originally of Polynesian introduction. No endemic species, i.e., native only to the islands were found.
Environmental Impact Statement
KAPOLEI BUSINESS-INDUSTRIAL PARK

No officially listed threatened or endangered plants were found along the drainage site, nor were any of the plants considered candidates or proposed for such status on the site (U.S. Fish and Wildlife Service 1985; Herbst 1987). Although Achyranthes rotunda, an officially listed endangered species, has been found on the adjacent Camp Malakole property (Char and Balakrishnan 1979; Whistler 1985), it does not occur on or near the drainage site. The wet, highly saline soils around the drainage channel would not provide suitable habitat for the Achyranthes.

Impact

The proposed improvements should not have a significant impact on the total island populations of the species involved as the majority are introduced species.

Mitigation Measures

None necessary as there are no adverse impacts.

D. FAUNA

An Avifaunal and Feral Mammal Survey was conducted (Phillip L. Bruner, Assistant Professor of Biology, BYU-H) on the property in July and August 1989. The report is attached as Appendix D and is summarized below.

No endemic land birds were recorded during the course of the field survey. The only likely endemic species which might occasionally forage in the area are the Hawaiian Owl or Pueo (Asio flammeus sandwicensis) and the Hawaiian Stilt (Himantopus mexicanus knudseni). The site apparently was inhabited by a variety of endemic birds in the past given the fossil evidence recovered from the "sink-holes" located on the makai portions of the property.

No resident indigenous land birds were recorded. The only potential species is the Black-crowned Night Heron (Nycticorax nycticorax). This species is opportunistic and may forage in flooded ditches and other temporary wet areas when such are available on the property. No resident indigenous seabirds were found during the survey and it is unlikely any would nest at this site due to an abundance of predators. Seabirds such as the Great Frigatebird (Fregata minor) may be seen overhead.

A total of ten Pacific Golden Plover (Pluvialis fulva) were recorded on the final day of the survey. No other species of migratory shorebird was found. Plover are probably the most common migratory species in Hawaii. They prefer open areas such as mud flats, fields and lawns. The only other likely migratory species that may occur on the property is the Ruddy Turnstone (Arenaria interpres).
Environmental Impact Statement

KAPOLEI BUSINESS-INDUSTRIAL PARK

A total of seventeen species of exotic (introduced) birds were found during this field survey. The most abundant species were Zebra Dove (Geotrygon striata), Red-vented Bulbul (Pycnonotus cafer), Japanese White-eye (Zosterops japonicus), Chestnut Mannikin (Lonchura malacca) and Nutmeg Mannikin (Lonchura punctulata). Exotic species not recorded on the actual survey but which potentially could occur at this locality include: Japanese Bushwarbler (Cettia diphone) and Ring-necked Pheasant (Phasianus colchicus). The habitat is probably too dry for the White-rumped Shama (Copsychus malabaricus) and too open for the Melodius Laughing-thrush (Garrulax canorus).

The only feral mammals observed during the survey were cats and the Small Indian Mongoose (Herpestes auropunctatus). Without a trapping program it is difficult to conclude much about relative abundance of rats, mice, cats and mongooses at this site. It is likely, however, that their numbers are typical of what one would find elsewhere in similar habitat on Oahu.

Impact

Doves and finches could decline in abundance as a result of habitat changes brought about by the proposed development. House Sparrows (Passer domesticus) and Common Myna (Acridotheres tristis) should increase in abundance following urbanization. The brief observation of the survey did not reveal any unusual mammal activity.

The section of the site designated for a drainage canal was specifically censused throughout its entire length and did not contain any unusual or distinctive habitat nor did the fauna found in this area differ significantly from that recorded elsewhere on the property.

Mitigation Measures

None necessary as there are no adverse impacts.

E. ARCHAEOLOGICAL/HISTORIC

An archaeological assessment was done for the project site by Cultural Surveys Hawaii in November 1989 (Hallett Hamma, Phd). The assessment report is enclosed as Appendix E and is summarized below.

Preceding the development of Barbers Point Harbor, extensive archaeological and paleontological salvage projects were undertaken under the auspices of the State Department of Transportation, U.S. Army Corps of Engineers, and the Campbell Estate. The area has been the subject of some 37 archaeological reports in the 1970's and 1980's. Pages 7 through 17 of the assessment report reviews the past archaeological and paleontological studies. Despite these many studies and the massive impacts on harbor construction, coral rubble stockpiling, sugarcane cultivation,
Environmental Impact Statement

KAPOLEI BUSINESS-INDUSTRIAL PARK

and other activities, there are still a number of specific areas of archaeological and paleontological concern.

Although a general reconnaissance of the entire project area was undertaken, the investigation focused on five (5) areas in particular:

1. The Malakole Road/Hanua Road Intersection.
2. The Area D archaeological survey zone.
3. The area around the Hawaii Raceway Park.
5. Alignment of the proposed drainageway area.

Following is a discussion of the archaeological findings in the studied area as well as the mitigative measures that are proposed.

Malakole Road/Hanua Road Sinkhole

A significant number of sinkholes (+/-100 over 1 meter wide were found in an 8-acre area located at the NW corner of Malakole Road and Hanua Road. Some of the sinks still have Polynesian cultigens (noni, Morinda citrifolia, and Ti Taetsia fructosa) growing in them. It has been estimated that 80 percent of these contain fossil bird bone. Photos of these sinkholes can be found in the Archaeological Assessment Report (Appendix E, Figures 11-15). Because of its accessibility, the close concentration of sinkholes and its scientific value, the consultant, as well as others (see Chapter XV, Comment Letters) recommends the site for preservation.

Mitigative Measures

The Applicant will install a fence enclosing the Malakole Sinkhole area, similar to the present enclosure around sinkhole B6-22 (see discussion under Bishop Museum Survey Zone D below). This enclosure will enable the site to be accessible for future research, as well as site visitations by the archaeological community and interested segments of the public, while protecting the resources from vandalism and/or destruction from unauthorized entry. Furthermore, the Applicant will explore the possibility of securing the sinkhole area for a period of 5-years to allow study and data recovery of the artifacts, or for the site to be acquired by qualified parties, as recommended by the City Council in its Resolution 88-476 (adopted January 11, 1989) to the State Legislature requesting funds be allocated to the State Department of Land and Natural Resources ...to acquire land for an Archaeological Park containing representative samples of sinkholes.
Environmental Impact Statement

KAPOLEI BUSINESS-INDUSTRIAL PARK

Bishop Museum Survey Zone D

This area is located within the NW portion of the project area. It is bounded by the O.R. & L. Railroad right-of-way on the NE side and an active quarry and stockpile area on the west side. Previous studies were conducted in this area by Mr. Aki Sinoto of the Bishop Museum (1976) which identified a total of 24 sites (Appendix E, Table 1). In this study further documentation of all sites, as well as the preservation of the large sinkhole (B6-22) was recommended. In the current study, the findings support the previous efforts of Mr. Sinoto, and further called attention to a small sinkhole area 100 feet west of the B6-22 sinkhole that contains at least one human burial, with additional reported burials in the immediate vicinity.

Mitigative Measures

In coordination with the Department of Land and Natural Resources, Historic Sites Office, further documentation (surveying, testing, data recovery/ mitigation excavation as necessary) will be performed for the sites identified in Zone D. These actions will take place prior to development within the area. Regarding Sinkhole site B6-22 and B6-137, these sites are on lands that will be made available for purchase, at reduce value, to the State of Hawaii, pursuant to previously executed agreements between the Applicant and the State of Hawaii (April 11, 1989). Additionally, the Applicant has already installed a chainlink fence enclosure around Sinkhole Site B6-22, which the archaeologist finds sufficient for the protection of the site.

Raceway Park Area

The Raceway Park Area was absent of any archaeological and/or paleontological sites.

Mitigative Measures

None necessary. However, should the development of this area encounter unknown or unexpected cultural features, deposits, or burials, work in the area would be suspended immediately until the monitoring archaeologist has the opportunity to inspect and evaluate the significance of the newly discovered materials. The Historic Sites Office of the State Department of Land and Natural Resources would be immediately notified to determine the appropriate course of action. This same process will apply to the entire project area.

O.R. and L. Right-of-Way

The Oahu Railway and Land Company is listed on the National Register (State Site #80-12-9714). It is of considered importance
that the integrity of the of the right-of-way and associated railroad bed, rail, ties, etc. be maintained.

The right-of-way for the O.R. and L. Railroad forms the NE boundary of the proposed project. The railroad bed once formed a continuous line from Honolulu through Wai'anae and around Kaena Point. On the makai side of the railroad bed is a major cane haul road. Any widening or improvement of the road should be made in makai direction to avoid impacting the railroad berm. However, breaching of the site for access and drainage would be reasonable, provided that the Historic Sites Section of the Department of Land and Natural Resources is consulted regarding the impacts associated with the breach.

**Mitigative Measures**

Present plans do not call for a road along the railroad berm. The Historic Sites Section of the Department of Land and Natural Resources will be consulted regarding any development that may impact and/or breach the berm, including the proposed second access road and the drainage channel.

**Large Enclosure in Cane Field**

According to Aki Sinoto (Bishop Museum), within the cane field bordering Survey Zone D to the SE lies a large stone wall enclosure whose interior and exterior have been cultivated in cane for many years. Although this feature was not observed during the present field work, its location should be determined, documented and possibly tested prior to development.

**Mitigative Measures**

Prior to development, the stone wall enclosure will be identified, documented and tested, as may be determined by the Historic Sites Section of the Department of Land and Natural Resources.

**Homestead Area**

NW of the O.R. & L. Right-of-way is a quadrangular old homestead area which appears to have been utilized as late as the mid 1970's, but is now abandoned and dilapidated. A number of sinkholes near the sugarcane ditch (more than 10) were observed and may have the potential for fossil avifauna remains significantly different from those populations recovered at lower elevations. The area is known as the Tongg Ranch and, because it consist of an elevated limestone formation, probably was never placed in cane cultivation. The homestead includes a house, large pig pen with concrete slabs and feeder containers, as well as an intact kiawe charcoal kiln. Background research on the origin and history of this Homestead, as well as testing of at least four of the sinkholes was recommended prior to land alteration.
Mitigative Measures

Background research on the origin and history of the Homestead and testing of the sinkholes will be appropriately conducted, in consultation with the Historic Sites Section of the Department of Land and Natural Resources, prior to land alteration.

Proposed Drainageway Alignment Area

This area was extensively studied, and it seems exceedingly unlikely that any significant subsurface remains would be encountered during the course of the excavation and construction of the drainage channel.

Mitigative Measures

None necessary. However, should construction of the channel uncover archaeological features, work will stop and the Historic Sites Section of the Department of Land and Natural Resources will be immediately notified to determine the appropriate course of action.

F. NOISE
(See Appendix F)

Field noise measurements and analyses were conducted by Darby & Associates to assess the potential noise impact of the proposed project.

Impact

Existing and future noise sources which may affect the proposed project site and its surroundings are:

- Project generated noise — industrial activities and truck movements.
- Aircraft operations associated with Honolulu International Airport (HIA) and Naval Air Station Barbers Point (NASBP). See Figures 17 and 18.
- Traffic movements on Kalaeloa Boulevard, Malakole Road and the new access road or roads.
- Existing industrial activities such as Chevron USA, Hawaiian Dredging & Construction Company-Precast Division, H-Power Plant, Applied Energy Services (AES) Power Plant, Kalaeloa Power Plant, sugarcane and other operations.
- Existing raceway operations.
The aircraft Day-Night Average Sound Level (Ldn) generated by HIA and NASBP is less than 65 dB throughout the project site and is less than the 70 dB Ldn guideline for clear acceptability for commercial/industrial areas.

Noise from existing industrial and agricultural activities near the project site should not have any significant impact on the proposed development.

Mitigative Measures

Various noise mitigation measures should be considered to minimize any potential noise impact due to the existing raceway and the proposed industrial activities within the project site. These include:

1) Compatible placement of the future businesses to create buffer zones between the proposed intensive industrial areas and the more noise sensitive locations.

2) Acoustical enclosures and walls.

3) Air conditioning/forced-air ventilation.

4) Interior acoustical finishes for sound absorption.

5) Raceway noise mitigation measures may involve either relocating the raceway or restricting night time racing activities.

The future traffic volumes on Kalaeloa Boulevard and on Malakole Road will be less with the project than without. Therefore, the project generated traffic should not, by itself, cause any significant noise impact on these existing roadways. However, traffic movements on a new access road may cause significant noise impact at the future noise sensitive areas to the north of the project site, and implementation of noise mitigation measures (e.g., noise barriers, sufficient setback distances, etc.) may be needed.

Noise due to construction of the project is not expected to cause any significant impact if the construction is completed prior to the development of future noise sensitive areas to the north of the project site. If not, special permits may be needed from the State Department of Health (DOH).

G. VIEW ASSESSMENT
(See Appendix G)

A visual assessment was conducted by Michael S. Chu, Land Architect, to identify potential visual impacts caused by the proposed development.
Environmental Impact Statement

KAPOLEI BUSINESS-INDUSTRIAL PARK

on existing visual resources in the area. The assessment takes into account existing policies and objectives regarding public views and directives regarding the protection of scenic resources.

The assessment examines views of scenic/open space resources from existing vantage points, (see Figures 11, 12 and 13) and attempts to provide certain anticipatory evaluations from yet to be developed locations. In such instances, a continuation of view assessment may be needed as the complexity of urbanization unfolds.

Impact

Overall Short Term Visual Impacts

Disruption to the visual quality of the area can be expected during the clearing, grading and construction of the site. Disruption can be expected to occur over time as the site will be developed in phases. The Ewa region, however, shall be undergoing substantial transformation and construction will be widespread over the entire area.

Long Term Visual Impacts

The broad, panoramic makai views and sense of open space as seen from certain portions of the freeway may be adversely affected by the imposition of 60 foot industrial buildings (as provided in the Ewa Development Plan, Special Provisions, Height Controls).

The penetration of possible industrial storage tanks and smoke exhaust stacks into the horizon line may adversely affect the visual quality of makai views as seen from the freeway and other future public areas.

The makai views from the Makakilo community may be adversely affected by the structures, roof masses and possible glare of the proposed industrial expansion.

Aesthetic consideration for the ground level views from the proposed mass transit corridor (O.R. & L. right-of-way) may be precluded.

Mitigative Measures

During construction, standard measures to include dust control, temporary grassing, construction phasing etc. should be employed to minimize both visual and environmental impacts.

- 37 -
Environmental Impact Statement  
KAPOLEI BUSINESS-INDUSTRIAL PARK

To mitigate the visual impact of urbanization from certain portions of the freeway, measures to include the utilization of height controls, should be aimed at:

(1) Lower building heights at the mauka side of the amendment area.

(2) Avoidance of industrial activities which require massive storage tanks or smoke stacks at the mauka side of the amendment area.

(3) Substantial landscape setbacks and buffers along the mauka edge.

Such measures would be consistent with the Special Provisions of the Ewa DP Special Provisions.

Subdivision design of the amendment area should consider placement and clustering of structures, particularly possible smoke stacks and storage tanks, based on the present industrial skyline configuration with preference towards consolidation of structural penetration into the horizon line.

Strict private covenants regarding design, material, color, and landscaping should be developed to avoid adverse impacts on neighboring communities.

H. AIR QUALITY  
(See Appendix H)

An air quality assessment for the proposed development was conducted by Jim Morrow, Environmental Management Consultant. The study includes impacts associated with vehicular emissions, construction activities, electrical generation, solid waste disposal, and agricultural activities. Tables 1 through 9 of Appendix H provide information on air sampling and monitoring data. Figures 1 through 12 include site photos and graphs depicting air quality samplings conducted at the Kalaeloa Boulevard - Malakole Road intersection during September 1989.

Results of the microscale analysis provide that the 1-hour "worst case" concentration estimates at the Kalaeloa Boulevard - Malakole Road intersection (Figures 9 and 10, Appendix H) indicate compliance with federal and state 1-hour carbon monoxide standards under current traffic conditions. Under "worst-case" conditions some of the State's 1-hour and 8-hour standards may be exceeded in certain "hot spots" in the future, with or without the proposed project. The highest concentration estimates occurred under a.m. traffic and weather conditions in an area close to the roadway (within 10 meters).
Impact

Traffic generated by the proposed project will contribute to reduced air quality along the major roadways serving the area. State and federal air quality standards will be met except possibly during the a.m. peak hours in areas close to the main intersections with Kalaeloa Boulevard.

Future industrial sources on the site may contribute to local and regional air pollution but the magnitude of that contribution cannot be quantified until specific sources are identified.

Electrical demand and solid waste disposal resulting from the project will contribute to increased emissions at the sites of the facilities which generate electricity and burn refuse.

Project occupants may at times be affected by emissions from the surrounding environment, specifically from the JCIP during southerly wind conditions and agricultural field burning. As urbanization replaces agriculture in Ewa however, this latter condition should decrease.

Construction activities will have a short-term impact on local air quality due to the additional construction vehicle activity and fugitive dust from construction activities.

Mitigative Measures

Dust control measures should be employed during the construction period. Dust control could be accomplished through frequent watering of unpaved roads and areas of exposed soil and landscaping of completed areas. Use of dust screens may be necessary when excavation and other construction activities occur close to existing dwellings.

Quantitative estimates of any direct air quality impacts from industries locating in the proposed development area cannot be made since specific industries have not been determined. However, it should be noted that before any air pollution source locates at the site state permits to construct and to operate must be obtained. At the time of permit application, an air quality impact assessment of potential emissions may be required.

National CO standards can be met, however, some exceedances of the state's 1-hour and 8-hour standards may occur in the future in certain "hot spot" areas under a "worst case" situation. Encouraging carpooling, mass transit use and implementation of an inspection/maintenance (I/M) program could reduce vehicle emissions. Increasing area bus service, limiting parking facilities to encourage use of
Environmental Impact Statement
KAPoleI BUSINESS-INDUSTRIAL PARK

public transportation, and increasing highway capacity among other measures would assist in reducing traffic-related adverse impacts. Air quality monitoring equipment is being purchased by the Estate of James Campbell and will be given to the State Department of Health.

Measures that could reduce offsite emissions from solid waste combustion and electrical power plants include:

- Encouraging low waste generating businesses and industries.
- Encouraging use of solar water heating and heat pumps wherever possible in the proposed business-industrial park and use of co-generation and other forms of waste heat recovery in those future industries which require their own boilers or heaters. Encourage siting of energy efficient industries in the proposed park.
- Improved technology in solid waste combustion and energy production.

I. HAZARDS

1. Industrial Slag

An area covering approximately 4.5 acres (see Figure 7) has been used to store industrial byproducts by Hawaiian Western Steel (HWS) since 1970. The materials placed in the waste pile by HWS consist primarily of steel slag, skulls, scale, scrubber solids and broken electrodes, and baghouse dust. An estimated 43,500 tons of the material was created. The baghouse dust is the primary hazardous constituent and represents less than 10 percent of the waste pile.

In 1987, the EPA issued a complaint under RCRA 3008 naming HWS and Campbell Estate as "respondents". The alleged violations were:

(1) Delinquent determination that waste was hazardous.
(2) Operation of a hazardous waste disposal unit without a permit.
(3) Operation of hazardous waste storage facility without a permit.

- 40 -
Environmental Impact Statement

KAPOLEI BUSINESS-INDUSTRIAL PARK

Impact on Ground Water Quality

Harding Lawson Associates conducted a Preliminary Ground-Water Quality Assessment which consisted of (1) installation of three ground water monitoring wells within the perimeter of the waste pile; (2) sampling of the groundwater for dissolved lead and cadmium (the key components of the baghouse dust, and reportedly the only constituents in the waste pile which exceeded waste classification criteria); (3) chemical analysis of the samples.

The Assessment found that there was no dissolved cadmium in the samples and that dissolved lead was found in only one bore hole at a level less than one percent of the EPA EP toxicity limit and approximately one-fifth of the EPA maximum contaminant level, which is the EPA standard for drinking water. The Assessment also found that the caprock beneath the site is not a source of drinking water because of high concentrations of chloride and other dissolved solids. The Assessment concluded "...[T]he chemical results indicate that the waste pile probably is not significantly affecting ground-water quality...". Another 1989 Harding Lawson Associates preliminary assessment of the site reviewed soil sampling data and concluded that the site poses "relatively low potential risk to human health and the environment".

Mitigative Measures

Hawaiian Western Steel and Harding Lawson Associates will propose to EPA a site remediation plan that calls for consolidating the waste pile to the west side of Hanua Street and containing the waste pile under a cap of natural coral material. Under this proposal, the only restriction on land use would be that the natural cap not be disturbed. Also, the area has been posted with signs to keep people away.

As of this time, however, the extent and scope of the contamination and the appropriate method of mitigation is still under study and review by Federal and State agencies, and remains an unresolved issue. Inasmuch as the EPA has filed an administrative complaint regarding this situation, a process is underway to resolve the issue.

2. Industrial Pollution

The proposed industrial development is intended to be developed under the I-2 and I-3 Industrial Districts of the Land Use Ordinance. Under the I-2 District, certain uses may have the potential to generate industrial and hazardous wastes. Such uses require the processing of a Conditional Use Permit, where the environmental effects are examined. At the present time, it is not the intent to develop the site for such uses.
Furthermore, prior to any air pollution source locating at the site, state permits to construct and to operate must be obtained. At the time of permit application, an air quality impact assessment of potential emissions may be required.

3. Aircraft Clearance

The project site is in the vicinity of Naval Air Station Barbers Point (NASBP), in an area under flight tracks of aircraft operating at the military airfield. Normal takeoffs and landings on Runway 11-29 take aircraft over the project area. The property is located under the 50:1 approach surface, the 7:1 transitional surface, the inner horizontal surface, and the 20:1 conical surface area (see Figures 17 and 18). The most restrictive of these is the 50:1 approach surface, where the top of structures should not exceed the sloping surface, which is approximately 86 feet in elevation (mean sea level datum) at a location about 3,000 feet from the end of Runway 11-29 (eastern end of the project site).

The Land Use Ordinance currently establishes a 60-foot height limit on adjoining lands in James Campbell Industrial Park (JCIP) and on lands adjoining the Barbers Point Harbor, which are zoned I-3 Waterfront Industrial. A similar height restriction, it is expected, will be applied to the project area.

4. Aircraft Noise

The project area is located under flight tracks of aircraft operating at the NASBP and consequently will experience noise generated by aircraft landings and takeoffs.

The Navy has commented that the land use change presents no incompatibility with the Navy's Air Installations Compatible Use Zones (AICUZ) noise footprint for NAS Barbers Point. However, future changes to air operations at the Station dictated by military necessity cannot be determined. Darby and Associates have concluded in their Noise Impact Analysis that the aircraft Day-Night Average Sound Level (Ldn) generated by the Honolulu International Airport (HIA) and Naval Air Station Barbers Point is less than 65 dB throughout the project site and is less than 70 dB Ldn guideline for clear acceptability for commercial/industrial areas.

No mitigative measures are needed or recommended.

5. Flooding / Earthquakes / Vulcanism

No danger from volcanic activity is expected, as the last phases of the Koolau and Waianae volcanos reportedly occurred well over one million years ago.
The probabilities for flooding and earthquakes are very low for the project area. The seismic risk classification for the entire island of Oahu is Zone 1 (Uniform Building Code). Zone 1 indicates that the island is subject to minor earthquake damage. The project area is designated as Zone D on the Flood Insurance Rate Map (FIRM), an area of undetermined, but possible, flood hazards. To alleviate current flooding problems and prevent flooding resulting from the proposed development, drainage improvements are being planned which would serve the project area as well as adjacent developments. These improvements would include an underground on-site drainage system of catch basins/manholes and pipe culverts, with conveyance to a proposed drainage channel. A supplemental EIS is in the process of being prepared for the drainage channel which will address flow and potential impacts on coastal water quality and marine biota. The analysis will also consider adjacent developments.

Because of the elevation and distance from shore, the project area is not subject to coastal hazards such as storm waves and tsunami inundations.

No mitigative measures are needed or recommended.

6. Barbers Point Harbor Safety Buffer Zone

A small portion (+/- 3 acres) of the area proposed for Commercial use, northeast of the Harbor, lies within the Barbers Point Harbor Safety Buffer Zone. The more restrictive zone, Zone I, does not penetrate into the site. Development in the impact area will be coordinated with the State Department of Transportation, Harbors Division, to ensure that activities proposed for this area meets with the intent of the buffer zone.
Environmental Impact Statement
KAPOLEI BUSINESS-INDUSTRIAL PARK

IV. SOCIO-ECONOMIC ASSESSMENT

This Chapter addresses the impact of the project on the community environment; its impact on agriculture; and the effects on State and County finances. Where appropriate, mitigative measures are proposed. In reviewing this Chapter, the public is encouraged to refer to the following reports in the Appendix, which have been the major source for much of the information that follows:

<table>
<thead>
<tr>
<th>APPENDIX</th>
<th>REPORT</th>
<th>PREPARER</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>Kapolei Business-Industrial Park,</td>
<td>Earthplan</td>
</tr>
<tr>
<td></td>
<td>Social Impact Assessment</td>
<td></td>
</tr>
<tr>
<td>J</td>
<td>Kapolei Business-Industrial Park,</td>
<td>Decision</td>
</tr>
<tr>
<td></td>
<td>Impact on Agriculture</td>
<td>Analysts Hawai'i</td>
</tr>
</tbody>
</table>

A. SOCIAL IMPACT ASSESSMENT
   (See Appendix I)

This social impact assessment of the Kapolei Business-Industrial Park was prepared for proposed amendments to the Ewa Development Plan. Earthplan prepared this report with assistance from independent contractor Michael P. Mays.

This social impact assessment provides a profile of the existing community to establish the social context in which project impacts may occur. This baseline data is extended by identifying the community's possible future scenario independent of the proposed project.

Community issues and concerns are identified, based on community interviews and historical trends to date. In terms of social impacts, this social impact assessment presents discussions on (1) the addition of a major employment center; (2) compatibility with residential, resort and commercial, and military uses; (3) on-site considerations; and (4) public services and facilities.

The social impacts dealing with schools/parks/police and fire protection/health care and other services are discussed in the appropriate subsection of Section V. The complete social impact assessment report is presented in Appendix I.

1. Profile Of The Existing Community
   a. Existing Communities in the Study Area

      The Study Area for this report is the Ewa Development Plan area. In the western half of the Ewa region are the residential
Environmental Impact Statement

KAPOLEI BUSINESS-INDUSTRIAL PARK

communities of Makakilo, Honokai Hale and Nanakai Gardens, as well as the James Campbell Industrial Park and Barbers Point Harbor.

The Naval Air Station Barbers Point (NASBP) is located in the south-central area of Ewa and abuts the eastern boundary of Kapolei Business-Industrial Park. In the eastern half of the Ewa region are the communities of Ewa Beach, the Iroquois Point Puuloa Military Family Housing, Ewa Villages and Honouliuli. Oahu's largest sugar producer, Oahu Sugar Company (OSCO) cultivates approximately 8,000 acres in the Ewa region.

b. Employment

In 1985, Ewa contained 10,628 jobs, and over half of these, or 52 percent, were located at the NASBP, as presented in Table S-1. As expected, NASBP accounted for virtually all of Ewa's military jobs. The area from Ewa Villages to Honokai Hale contained one-fifth of Ewa's total jobs. Almost half of Ewa's industrial jobs are in this area. West Ewa Beach contained 17 percent of Ewa's total jobs and two-thirds of the Ewa's finance, insurance and real estate jobs. Makakilo and east Ewa Beach/Iroquois Point Puuloa Military Family Housing, all residential communities, collectively contained only ten percent of Ewa's total jobs.

c. Population and Housing

Ewa's population growth between 1980 and 1985 was proportionally much lower than island-wide growth. As Table S-2 shows, Ewa's population grew by three percent over this five-year period, while the island-wide population grew by five percent. The areas which experienced some growth included the Ewa to Honokai Hale area and Makakilo. Other areas experienced only nominal growth, or a slight decrease.

The housing stock in the study area also experienced a relatively low increase of four percent, as compared to 7.12 percent increase island-wide. In 1985, Ewa had 9,530 units, sixty percent of which were single family units.

Historically, the average household size in Ewa is larger than the island-wide household size. Compared to the island-wide household size of 3.14 persons in 1985, Ewa had an average of 3.98 persons per household.
Environmental Impact Statement
KAPOLEI BUSINESS-INDUSTRIAL PARK

Table S-1
Study Area Employment
Number and Breakdown by Study Area
1985

<table>
<thead>
<tr>
<th></th>
<th>Ewa D. P. Area</th>
<th>Ewa to Honokal Hale</th>
<th>Makahiki</th>
<th>West Ewa Beach</th>
<th>East Ewa Beach &amp; Iroquois Pt.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Military</td>
<td>4,339</td>
<td>4146</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>% By Sub-area</td>
<td>100%</td>
<td>95%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Government</td>
<td>1,185</td>
<td>516</td>
<td>496</td>
<td>17</td>
<td>38</td>
</tr>
<tr>
<td>% By Sub-area</td>
<td>100%</td>
<td>43%</td>
<td>81%</td>
<td>9%</td>
<td>3%</td>
</tr>
<tr>
<td>Transport, Communications, Utilities</td>
<td>196</td>
<td>18</td>
<td>62</td>
<td>19</td>
<td>97</td>
</tr>
<tr>
<td>% By Sub-area</td>
<td>100%</td>
<td>9%</td>
<td>31%</td>
<td>9%</td>
<td>49%</td>
</tr>
<tr>
<td>Industrial</td>
<td>1,149</td>
<td>38</td>
<td>525</td>
<td>60</td>
<td>526</td>
</tr>
<tr>
<td>% By Sub-area</td>
<td>100%</td>
<td>3%</td>
<td>45%</td>
<td>5%</td>
<td>45%</td>
</tr>
<tr>
<td>Finance, Insurance, Real Estate</td>
<td>221</td>
<td>23</td>
<td>14</td>
<td>27</td>
<td>147</td>
</tr>
<tr>
<td>% By Sub-area</td>
<td>100%</td>
<td>14%</td>
<td>6%</td>
<td>12%</td>
<td>66%</td>
</tr>
<tr>
<td>Service</td>
<td>1,760</td>
<td>274</td>
<td>310</td>
<td>17</td>
<td>632</td>
</tr>
<tr>
<td>% By Sub-area</td>
<td>100%</td>
<td>15%</td>
<td>17%</td>
<td>0%</td>
<td>35%</td>
</tr>
<tr>
<td>Retail</td>
<td>1,375</td>
<td>485</td>
<td>496</td>
<td>47</td>
<td>289</td>
</tr>
<tr>
<td>% By Sub-area</td>
<td>100%</td>
<td>35%</td>
<td>36%</td>
<td>3%</td>
<td>21%</td>
</tr>
<tr>
<td>Construction</td>
<td>493</td>
<td>32</td>
<td>222</td>
<td>73</td>
<td>144</td>
</tr>
<tr>
<td>% By Sub-area</td>
<td>100%</td>
<td>6%</td>
<td>45%</td>
<td>14%</td>
<td>29%</td>
</tr>
<tr>
<td>Agriculture</td>
<td>403</td>
<td>44</td>
<td>268</td>
<td>32</td>
<td>59</td>
</tr>
<tr>
<td>% By Sub-area</td>
<td>100%</td>
<td>10%</td>
<td>66%</td>
<td>7%</td>
<td>14%</td>
</tr>
<tr>
<td>Total</td>
<td>10,628</td>
<td>5,554</td>
<td>2,171</td>
<td>219</td>
<td>1,788</td>
</tr>
<tr>
<td>% By Sub-area</td>
<td>100%</td>
<td>52%</td>
<td>20%</td>
<td>2%</td>
<td>16%</td>
</tr>
</tbody>
</table>

NASBP or Naval Air Station, Barbers Point is in Traffic Assessment Zone 139.
Ewa to Honokal is in Traffic Assessment Zone 142.
Makahiki is in Traffic Assessment Zone 140.
West Ewa Beach is in Traffic Assessment Zone 138.
East Ewa Beach and the Iroquois Point Pahoa Military Family Housing are in Traffic Assessment Zone 137.

## Table S-2
### Population and Housing Trends

<table>
<thead>
<tr>
<th></th>
<th>Ewa D.P. Area</th>
<th>NASBP</th>
<th>Ewa to Hookal Hale</th>
<th>Makahilo</th>
<th>West Ewa Beach</th>
<th>East Ewa Beach and Iroquois</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>POPULATION</strong></td>
<td>35,695</td>
<td>36,590</td>
<td>3%</td>
<td>2,942</td>
<td>2,913</td>
<td>-1%</td>
</tr>
<tr>
<td>% of total study area</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td><strong>HOUSING UNITS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Housing Units</td>
<td>9,145</td>
<td>9,530</td>
<td>3.9%</td>
<td>854</td>
<td>854</td>
<td>0%</td>
</tr>
<tr>
<td>Single Family Units</td>
<td>3,527</td>
<td>3,724</td>
<td>6.2%</td>
<td>0</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Multi-family Units</td>
<td>1,246</td>
<td>1,402</td>
<td>14.9%</td>
<td>0</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td><strong>OCCUPIED DWELLINGS</strong></td>
<td>8,809</td>
<td>9,191</td>
<td>4.3%</td>
<td>301</td>
<td>301</td>
<td>-1.8%</td>
</tr>
<tr>
<td><strong>HOUSEHOLD SIZE</strong></td>
<td>4.05</td>
<td>3.98</td>
<td>-1.8%</td>
<td>3.01</td>
<td>2.81</td>
<td>-6.6%</td>
</tr>
</tbody>
</table>

NASBP Or Naval Air Station, Barbers Point is in Traffic Assessment Zone 139.
Ewa to Hookal Hale is in Traffic Assessment Zone 142.
Makahilo is in Traffic Assessment Zone 140
West Ewa Beach is in Traffic Assessment Zone 134.
East Ewa Beach and the Iroquois Point Pauoa Military Family Housing are in Traffic Assessment Zone 137.

**SOURCE:** City & County of Honolulu Dep't. of General Planning, Planning Information Branch. Traffic Assessment Zones. October 1987. Calculations performed by Earthplan.

The housing units for Ewa Beach include 20 units used for visitors in 1980 and 10 units in 1985. The housing units in Barbers Point Naval Air Station and Iroquois Point include barracks. Barracks are not considered single or multi-family dwellings in this information.
d. Other Population Characteristics

Compared to island-wide proportions, Ewa had the following characteristics in 1980 (Table 5-3):

- slightly younger than the rest of the island, with a median age of 25.6 (Oahu: 28 years);
- significantly higher proportions of Caucasians and Filipinos, a moderately higher proportion of Hawaiians, and fewer Japanese and Chinese people;
- fewer people born in Hawaii and more people born in other parts of the United States;
- slightly less educated, with 12.4 percent completing four-year college (Oahu: 21.7 percent);
- lower mean family income.

e. Profile of Communities Nearest the Project Site

The communities nearest the project site are NASBP, Honokai Hale / Nanakai Gardens, and Makakilo. Because of the proximity and potential for interaction with the Kapolei Business-Industrial Park, these communities are further described. Note that Honokai Hale / Nanakai Gardens area is included with Ewa Villages in the census district and traffic assessment zones; thus, the Ewa-to-Honokai Hale area includes these communities in this discussion.

- Population and Housing — In 1985, the NASBP housed approximately 2,900 people and about 2,000 persons resided in Honokai Hale / Nanakai Gardens. An estimated 8,628 persons lived in Makakilo. Hence, approximately 13,500 people lived near the project site. The only community which experienced any growth in the first half of this decade was Makakilo.

- Employment — Of the three areas, the NASBP contained the largest number of jobs and accounted for 52 percent of Ewa's total jobs. NASBP contained over 5,500 jobs in 1985, and three-fourths of these were military. The Ewa-to-Honokai Hale area contained one-fifth of Ewa's total jobs. Because of its strong residential character, Makakilo accounted for only two percent of Ewa's total jobs.
### Table S-3

Social and Economic Characteristics  
Oahu, Ewa and Sub-Areas, 1980

<table>
<thead>
<tr>
<th></th>
<th>Oahu</th>
<th>Ewa D.P. Area</th>
<th>BPNAS</th>
<th>Ewa to Honokaa</th>
<th>Ewa Beach</th>
<th>Makakilo</th>
<th>West Ewa Beach</th>
<th>East Ewa Beach &amp; Iroquois Prd</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Resident Population</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1970</td>
<td>629,176</td>
<td>24,087</td>
<td>3,187</td>
<td>4,114</td>
<td>4,226</td>
<td></td>
<td>7,801</td>
<td>4,759</td>
</tr>
<tr>
<td>1980</td>
<td>762,565</td>
<td>36,234</td>
<td>2,942</td>
<td>4,653</td>
<td>8,559</td>
<td></td>
<td>7,643</td>
<td>12,437</td>
</tr>
<tr>
<td><strong>Percent Change</strong></td>
<td>21.2%</td>
<td>50.4%</td>
<td>-7.7%</td>
<td>13.1%</td>
<td>102.5%</td>
<td>-2.0%</td>
<td>161.3%</td>
<td></td>
</tr>
<tr>
<td><strong>Median Age</strong></td>
<td>28</td>
<td>25.6</td>
<td>22.1</td>
<td>33.1</td>
<td>25.9</td>
<td></td>
<td>24.8</td>
<td>21.3</td>
</tr>
<tr>
<td><strong>Ethnicity</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Caucasian</td>
<td>33.1%</td>
<td>44.5%</td>
<td>73.9%</td>
<td>11.0%</td>
<td>44.1%</td>
<td>37.5%</td>
<td>47.4%</td>
<td></td>
</tr>
<tr>
<td>Japanese</td>
<td>24.9%</td>
<td>8.8%</td>
<td>1.5%</td>
<td>19.1%</td>
<td>10.6%</td>
<td>11.8%</td>
<td>53.1%</td>
<td></td>
</tr>
<tr>
<td>Chinese</td>
<td>6.9%</td>
<td>2.0%</td>
<td>0.2%</td>
<td>1.0%</td>
<td>2.9%</td>
<td>2.4%</td>
<td>1.1%</td>
<td></td>
</tr>
<tr>
<td>Filipino</td>
<td>12.6%</td>
<td>24.4%</td>
<td>11.5%</td>
<td>53.7%</td>
<td>19.9%</td>
<td>20.8%</td>
<td>24.8%</td>
<td></td>
</tr>
<tr>
<td>Hawaiian</td>
<td>10.5%</td>
<td>12.4%</td>
<td>1.1%</td>
<td>8.3%</td>
<td>12.6%</td>
<td>14.2%</td>
<td>12.4%</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>11.8%</td>
<td>7.5%</td>
<td>11.8%</td>
<td>6.8%</td>
<td>9.9%</td>
<td>13.3%</td>
<td>9.6%</td>
<td></td>
</tr>
<tr>
<td><strong>Place Of Birth</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Born In Hawaii</td>
<td>55.1%</td>
<td>49.5%</td>
<td>6.6%</td>
<td>62.8%</td>
<td>53.5%</td>
<td>61.4%</td>
<td>44.1%</td>
<td></td>
</tr>
<tr>
<td>Other U.S. Born</td>
<td>30.1%</td>
<td>36.0%</td>
<td>76.5%</td>
<td>4.1%</td>
<td>37.2%</td>
<td>26.8%</td>
<td>42.7%</td>
<td></td>
</tr>
<tr>
<td>Foreign Born</td>
<td>14.8%</td>
<td>14.5%</td>
<td>12.9%</td>
<td>33.1%</td>
<td>9.3%</td>
<td>11.8%</td>
<td>13.2%</td>
<td></td>
</tr>
<tr>
<td><strong>Education (Selected Persons 25+ Years)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 Years Or Less Completed</td>
<td>14.4%</td>
<td>14.3%</td>
<td>4.0%</td>
<td>39.1%</td>
<td>8.4%</td>
<td>14.3%</td>
<td>9.2%</td>
<td></td>
</tr>
<tr>
<td>High School Completed</td>
<td>35.5%</td>
<td>43.0%</td>
<td>54.8%</td>
<td>26.9%</td>
<td>46.1%</td>
<td>43.9%</td>
<td>45.8%</td>
<td></td>
</tr>
<tr>
<td>College</td>
<td>21.7%</td>
<td>12.4%</td>
<td>8.7%</td>
<td>6.9%</td>
<td>18.4%</td>
<td>9.1%</td>
<td>13.2%</td>
<td></td>
</tr>
<tr>
<td><strong>Potential Labor Force</strong></td>
<td>574,903</td>
<td>23,862</td>
<td>2,193</td>
<td>3,296</td>
<td>5,878</td>
<td>5,325</td>
<td>7,260</td>
<td></td>
</tr>
<tr>
<td><strong>In Labor Force</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Civilian</td>
<td>59.1%</td>
<td>49.5%</td>
<td>12.5%</td>
<td>56.3%</td>
<td>56.4%</td>
<td>58.8%</td>
<td>41.5%</td>
<td></td>
</tr>
<tr>
<td>Military</td>
<td>11.5%</td>
<td>27.0%</td>
<td>63.2%</td>
<td>2.2%</td>
<td>12.9%</td>
<td>6.2%</td>
<td>25.0%</td>
<td></td>
</tr>
</tbody>
</table>

CONTINUED ON FOLLOWING PAGE
Environmental Impact Statement
KAPOLEI BUSINESS-INDUSTRIAL PARK

Table S-3 - CONTINUED
Social and Economic Characteristics
Oahu, Ewa and Sub-Areas, 1980

<table>
<thead>
<tr>
<th></th>
<th>Oahu</th>
<th>Ewa D. P. Area</th>
<th>BPHAS</th>
<th>Ewa to Honokai Hale</th>
<th>Makakilo</th>
<th>West Ewa Beach</th>
<th>East Ewa Beach &amp; Iroquois Pnt</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean Family Income</td>
<td>$27,318</td>
<td>$21,000</td>
<td>$10,377</td>
<td>$21,465</td>
<td>$26,659</td>
<td>$22,789</td>
<td>$18,015</td>
</tr>
<tr>
<td>Families Below Poverty Level</td>
<td>7.5%</td>
<td>7.2%</td>
<td>10.5%</td>
<td>7.2%</td>
<td>3.1%</td>
<td>8.5%</td>
<td>7.4%</td>
</tr>
<tr>
<td>Housing Vacancy Rate</td>
<td>8.2%</td>
<td>3.4%</td>
<td>5.2%</td>
<td>2.4%</td>
<td>9.9%</td>
<td>1.2%</td>
<td>2.3%</td>
</tr>
<tr>
<td>Persons Per Household</td>
<td>3.31</td>
<td>3.96</td>
<td>3.81</td>
<td>4.07</td>
<td>3.66</td>
<td>3.77</td>
<td>4.37</td>
</tr>
<tr>
<td>Owner-Occupied Units</td>
<td>49.9%</td>
<td>50.2%</td>
<td>0.0%</td>
<td>28.5%</td>
<td>70.5%</td>
<td>60.0%</td>
<td>42.9%</td>
</tr>
</tbody>
</table>

NOTES:
NASBP or Naval Air Station Barbers Point is in Census Tract 85.
Ewa to Honokai Hales is in Census Tract 86.02.
Makakilo is in Census Tract 86.01; this census tract also includes Kunia.
West Ewa Beach is in Census Tract 84.
East Ewa Beach and Iroquois Point Puuloa Navy Housing is in Census Tract 83.


- Social and Economic Characteristics - Compared to the Ewa regional median age of 25.6 years, NASBP was the youngest community with a median age of 22.1 years. With a median age of 33.1 years, Ewa-to-Honokai Hale was the oldest community in Ewa. The median age of Makakilo was similar to the regional median. Of all of these communities, Makakilo tended to resemble the regional ethnic breakdown and had similarly large proportions of Caucasians and Filipinos. The other communities have significant differences. Compared to the island-wide and regional proportions of Caucasians, 73.9 percent of NASBP residents were Caucasian. The Ewa-to-Honokai Hale area had the lowest proportion of Caucasians at eleven percent. On the other hand, Filipinos accounted for 53.7 percent of Ewa-to-Honokai Hale's population, as compared to Oahu's 12.6 percent and the regional 24.4 percent. Only 8.6
percent of NASBP residents were born in Hawaii and over three-quarters of NASBP residents were born in other parts of the United States. Makakilo and Ewa-to-Honokai Hale, on the other hand, had higher proportions of Hawaii-born residents. Compared to the island-wide residents, all of these communities had proportionally fewer people completing a four-year college, although Makakilo's share was higher than the regional average.

2. Policies And Proposals Which Will Affect The Community's Future

The three major forces which have shaped the existing Ewa community are national defense needs, the growth of large-scale sugar cultivation and the growth of suburban community. Public policies add a fourth major force in shaping Ewa. Government efforts are directing large-scale residential growth to this area, and construction is already underway for new planned communities.

Kapolei Business-Industrial Park is being proposed as part of this community in transition. This social impact assessment reviewed public policies and proposed changes to understand what is anticipated to occur in Ewa independent of the proposed project. Based on a review of these policies and proposals, the following scenario is likely to occur with or without Kapolei Business-Industrial Park:

(1) Significant Increase In Residential Population -- Between 74,139 and 111,376 people are estimated to be living in the Ewa Development Plan area in the year 2010, as shown on Table 5-4. This population increase implies that the current proposals for residential growth could accommodate a population two to three times that of the current Ewa population.

(2) Significant Increase In Employment -- Market study projections indicate that job opportunities within the planning region are projected to increase about 600 percent over a twenty year period (Leventhal, 1986).

(3) Establishment Of City-related Mixed Uses And Secondary Urban Center In "Western" Ewa -- Kapolei City, Ko Olina and the James Campbell Industrial Park, all situated in the western half of the Ewa Development Plan area, are major employment generators -- which essentially create the city-like environment in the secondary urban center.

(4) Intensification Of Residential Uses In Eastern Ewa -- The City and County of Honolulu General Plan designates the eastern half of Ewa, generally the area along Fort Weaver
Environmental Impact Statement
KAPOLEI BUSINESS-INDUSTRIAL PARK

Road, as Ewa's urban-fringe and this area is intended primarily for residences.

(5) Retention Of Military Uses — The NASBP and the IPP Military Family Housing will likely continue their operations.

Table S-4

Population Projections by Development Plan Area, 2010

<table>
<thead>
<tr>
<th>General Plan Distribution</th>
<th>2010 Population Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>of Residential Population</td>
<td>Based on Series M-K Projections</td>
</tr>
<tr>
<td>Primary</td>
<td></td>
</tr>
<tr>
<td>Urban Center</td>
<td>45.1% - 49.8%</td>
</tr>
<tr>
<td>Ewa</td>
<td>12.0% - 13.3%</td>
</tr>
<tr>
<td>Central Oahu</td>
<td>14.9% - 16.5%</td>
</tr>
<tr>
<td>East Honolulu</td>
<td>5.3% - 5.8%</td>
</tr>
<tr>
<td>Koolauupoko</td>
<td>11.0% - 12.2%</td>
</tr>
<tr>
<td>Koolauloa</td>
<td>1.3% - 1.4%</td>
</tr>
<tr>
<td>North Shore</td>
<td>1.6% - 1.8%</td>
</tr>
<tr>
<td>Waianae</td>
<td>3.8% - 4.2%</td>
</tr>
<tr>
<td>Total Oahu</td>
<td>95.0% - 105.0%</td>
</tr>
</tbody>
</table>

1 - City Council, Resolution Relating to Amending the General Plan of the City and County of Honolulu, No. 88-404, CD-1, FD-1.

2 - Table 18 of the The State of Hawaii Data Book 1988 (State Department of Business and Economic Development, 1988) provides a population projection of 999,500 persons for the City and County of Honolulu in 2010.

   a. Community Issues Independent Of The Proposed Project

The types of issues addressed by a Neighborhood Board and subsequent actions often reflect values and concerns of the constituent population. This study examined the minutes of the Ewa Neighborhood Board No. 23 over a two-year period. Generally, this Board dealt with two areas of community issues:

- 52 -
Environmental Impact Statement

KAPOLEI BUSINESS-INDUSTRIAL PARK

(1) Problems Typically Associated With Stable, Active And Predominantly Residential Communities -- These included controlling and minimizing crime, improving the quality and facilities in the public education system, improving roadway infrastructure and circulation, monitoring and improving recreational facilities, and improving the delivery of ambulance, police and fire protection services. As a whole, the Board maintained an ongoing working relationship with the Ewa Beach, Makakilo and Honokai Hale Community Associations. This Neighborhood Board also worked closely with public officials, area developers, and landowners in advocating community improvements.

(2) Potential Effects Of Proposed Developments -- This Neighborhood Board is somewhat unique among the other neighborhood boards in that Ewa is a community in constant transition. New communities and development proposals were discussed at virtually every meeting during this two-year period. Generally, this Neighborhood Board tended to support these developments, providing that (1) the proposal is consistent with the Kapolei Master Plan of The Estate of James Campbell and (2) the proposal addresses the necessary infrastructure and public service requirements.

The Estate of James Campbell assembled the Community Advisory Committee on the Secondary Urban Center which provides community input into the Estate's planning process. In 1987, a series of community workshops were held to define community issues and needs for community services and facilities. The workshops focused on discussions in governmental services, education, and recreation/culture/arts. Recommendations included the following:

- Governmental Services -- fully-operational police station in the Ewa (Kapolei) Town Center; siting of emergency ambulance service near the proposed Ewa (Kapolei) Town Center; transit line extending to Kō Olina and more evaluation of viable water transportation and shuttle service; location of a civic center in the Ewa (Kapolei) Town Center and a secondary City Hall providing a full range of services and auxiliary state offices; locate civil defense communication center in the Ewa (Kapolei) Town Center

- Education -- setting aside relatively level and "expandable" sites for all schools; move West...
Environmental Impact Statement

KAPOLEI BUSINESS-INDUSTRIAL PARK

Oahu College to the second city; locate high technology and adult education programs at the James Campbell Industrial Park; provide adequate space for resource teachers and the arts; and other improvements.

☐ Recreation/Culture/Art — active recreation and cultural facilities at the planned Kapolei Regional Park; a central library and museum adjacent to the Kapolei Regional Park; a public golf course in Ewa.

b. Community Issues on Kapolei Business-Industrial Park

Earthplan conducted interviews with twenty-two community residents and organization leaders to supplement information from printed sources of material regarding community needs and values, and to identify community issues and concerns relative to Kapolei Business-Industrial Park. No attempt was made to assess the extent or 'quantity' of project support or opposition.

The issues which these people identified are preliminary in that they indicate what is important to the community at a specific point in time (October and November 1989). Changes in attitude and issues may occur in time, given possible project modifications and other events or influences in the community.

The following summarizes issues and concerns raised by those interviewed:

☐ Consistent Support For Overall Kapolei Development
   — All of those interviewed expressed strong support for the development of the Ewa region into the secondary urban center. Many favored the regional development because of its potential to improve the quality of life in the area through increased employment opportunities, more diversity in residents, and improved infrastructure. A few had strong concerns about the effects of growth in the area on the existing communities. They feared the loss of rural communities and the inability of the elderly to handle the increased taxes resulting from increased property values.

☐ General Support For Kapolei Business-Industrial Park
   — All of those interviewed were aware of the proposed expansion of James Campbell Industrial Park, though most did not know specific project components or site boundaries. Those interviewed favored the Kapolei Business-Industrial Park for the following reasons:
Environmental Impact Statement
KAPOLEI BUSINESS-INDUSTRIAL PARK

- The project is part of the overall Kapolei long-range plan, which has been consistently supported by Ewa organizations.

- The project would help current Ewa residents by providing increased job opportunities near their homes.

- Some felt that Hawaii's jobs are too service-oriented and that more industrial jobs would diversify the available employment in the area.

- Many felt that the proposed commercial component would benefit the community by (1) providing a buffer between the business-industrial park and Ko Olina, and (2) providing more shopping and office areas.

- Those interviewed felt that the proposed maritime industrial component would help improve the efficiency of transporting and storing shipped goods.

☐ Environmental Impacts And Public Safety -- The most frequently expressed concerns were related to potential environmental effects of industrial uses. Residents of nearby communities cited examples of industrial impacts, such as dust from the quarry, smoke and fumes from some plants at the James Campbell Industrial Park, and noise from the raceway park. They did not want these effects continued or increased by the proposed project, and urged compliance with Environmental Protection Agency regulations. Some also strongly discouraged any waivers from these regulations. Many were also concerned about the types of activities which will be permitted at the Kapolei Business-Industrial Park. Specific undesired uses included oil refinery and storage, as well as fireworks and plastic explosives.

☐ Visual Impacts -- A few felt that industrial facilities, such as smoke stacks and factories, are typically unattractive. They were concerned that the project would add to the industrial landscape and would eventually result in a visual blight. Some of those interviewed were optimistic that economics would preclude siting unattractive facilities near the more people-oriented areas of Ko Olina and Kapolei.

☐ Adequacy Of Infrastructure And Public Services -- Many felt that public officials need to ensure that the proposed project can be adequately serviced by
existing and improved infrastructure. They were particularly concerned about (1) the roadways; (2) the sewage system; and (3) water availability. Those interviewed wanted to make sure that adequate police and fire protection will be available. Further, they stressed the importance of an efficient evacuation system for major industrial accidents.

- Desired Facilities In Kapolei Business-Industrial Park
  - Those who participated in the 1987 workshops of the Community Advisory Committee on the Secondary Urban Center reiterated the recommendation for high technology and adult educational facilities at the Kapolei Business-Industrial Park. They also expressed a desire to see fishing-oriented facilities, such as a canny and an ice plant, in the maritime industrial area.

4. Potential Social Impacts Of The Kapolei Business-industrial Park
   a. Addition of a Major Employment Center
      i. Probable Non-Project Changes

Current proposals for residential development in Ewa could accommodate a population two to three times that of the current Ewa population. In the vicinity of the project site, the City of Kapolei is intended to be the nucleus of the secondary urban center. The existing community will therefore have been undergoing a gradual adaptation to this major influx of new people by the time Kapolei Business-Industrial Park begins implementation. Some of the changes which may have begun as the project is implemented are as follows:

- Population And Cultural Diversification — When the project begins implementation, the residential profile of the Ewa area, including the eastern half, will have begun to gradually reflect more of a cross-section of the island-wide community. Though many of these developments will offer affordable housing, many of the new residents will be part of the market housing segment and will therefore have incomes above the current median income level for the Ewa area. With these changes will come cultural diversity.

- Disruption Of The Slow-paced Lifestyle — The initial impact of impending change is an alteration in the current slow-paced lifestyle which
characterizes the residential communities of the Ewa region.

◆ **Competition For Public Facilities And Services** – Concurrent with the influx of new residents will be competition for public facilities, such as parks, and increased usage of public services, including police and fire protection.

◆ **Shift In Employment Patterns And Increased Job Competition** – As the Kapolei Business-Industrial Park is developed, the Ewa region will be experiencing an increased diversity in types of employment. Many current Ewa residents who are working outside Ewa will have jobs closer to home. Ewa's new residents will also be competing for the same jobs.

◆ **Introduction Of Visitor Industry To The Ewa Region** – Ewa residents will have begun to adapt to having a resort community at Ko Olina in their region.

ii. **Potential Project Effects**

Although the project will not directly increase the residential population, it will contribute to the influx of new people by being a major employment center by adding 9,700 jobs to the region by 2035. The following are the potential effects of the project's employment-generating aspect:

◆ **Island-wide Identity** – The lack of available industrial land is a major island-wide problem. The proposed project will help meet the demand for industrial land by increasing the island-wide supply of industrial land and will therefore likely have an island-wide identity, rather than being solely a regional asset.

◆ **Increase In Job Diversity** – With the development of the City of Kapolei, the types of Ewa jobs will diversify as shopping centers, government agencies, professional office buildings and public facilities are developed. The proposed project will further add to this diversity by adding a substantial number of intensive and maritime industrial employment-generating activities.

◆ **Increase In In-migration Of Non-Ewa Employees** – It is likely that non-Ewa residents will also be employed at the Kapolei Business-Industrial
Environmental Impact Statement

KAPOLEI BUSINESS-INDUSTRIAL PARK

The proposed project will provide employment opportunities which will be available to all residents, as well as relocation alternatives for existing non-Ewa industrial uses. Hence, the project will cause the in-migration of many non-Ewa employees.

- Consistency With Growth Policies -- A major consideration in public policy is to redirect traffic currently flowing into Honolulu proper by providing alternative employment centers outside of the existing urban core. The proposed project will be consistent with these policies.

b. Compatibility with Nearby Uses

i. Residential Uses

The need for industrial land will continue to increase, and long-range policies are attempting to create a total urban environment in Ewa. Compatibility between the industrial activities and nearby residents will therefore require ongoing monitoring to ensure an economically viable and socially peaceful co-existence in the community. The following are possible incompatibility problems which may arise and will require consideration in the implementation of the Kapolei Business-Industrial Park:

- Sharing Of Transportation Facilities -- Major regional roadway networks, including the H-1 Freeway and Kalaeloa Boulevard, will be increasingly shared by existing and new residents. Large vehicles transporting goods and materials from the proposed project to other parts of the island will increase as a result of the project, and private operators and public officials will need to assess overall traffic patterns to minimize traffic congestion and to ensure public safety.

- Air, Wind and Noise -- Typical considerations in industrial-residential compatibility include the disturbances and inconveniences resulting from nearby industrial activities. Ultimately, measures regulated by the Environmental Protection Agency (EPA) will minimize these occurrences. Of particular importance are noise, discomfort and other problems, ranging from offensive odors and breathing impairment, resulting from air emissions.
Environmental Impact Statement

KAPOLEI BUSINESS-INDUSTRIAL PARK

- Public Safety - Public safety facilities and services, including civil defense, are to be incorporated in the government-related facilities planned for Kapolei. Because of the proximity of Kapolei to the proposed project, Federal, State and City agencies will undoubtedly be assessing potentially dangerous and hazardous industrial activities to ensure that the nearby communities will be protected.

ii. Resort and Commercial Uses

The project site abuts the Ko Olina resort/residential community on its northern and western boundaries. Industrial-resort compatibility has essentially the same considerations as those pertaining to residential uses, such as the sharing of transportation facilities; air, wind and noise problems; and public safety.

In addition, the proximity of resort uses to intensive industrial activities would raise another compatibility consideration. Tourists visit Hawaii for its climate, environmental beauty and inviting ocean. Although the on-site facilities, including the newly-created beaches, will create a pleasing and attractive ambience, the surrounding environment will be equally important in creating a total experience. Furthermore, the industrial area will provide opportunities for businesses to serve the needs of the resort area.

The orientation of Ko Olina, relative to the adjacent maritime activities at Barbers Point, and the existing James Campbell Industrial Park will therefore be important considerations in siting of visitor facilities. The Kapolei Business-Industrial Park will add to the current industrial "landscape" of the area, and as implementation of both projects occur, coordination will be needed to ensure visual compatibility.

iii. Military Uses

The Naval Air Station, Barbers Point (NASBP) is located immediately east of the project site. In 1989, a settlement agreement was reached between The Estate of James Campbell and the Navy to ensure compatible co-existence of existing and proposed uses in Ewa. This agreement included a Compatible Land Use Map (CLUM) which designates five areas within the Accident Potential Zones I and II, and specified allowable and non-permitted uses within each area. Building parameters were specified and the Navy also agreed to
Environmental Impact Statement
KAPOLEI BUSINESS-INDUSTRIAL PARK

purchase protected flight paths over the Estate's land for $6.5 million.

The Kapolei Business-Industrial Park is not in any of the five designated areas and falls generally within 55 to 60 Day-Night Average Sound Level (Ldn). In the "Suggested Land Use Compatibility," the uses permitted under the proposed B-2, I-2 and I-3 zoning are generally considered compatible within this noise range (Figure ES-6, Harris Miller and Hanson, Inc., July 1989).

The proposed project is therefore anticipated to be compatible with the NASBP aviation activities, and this compatibility can be monitored in the ongoing dialogue process outlined in the recent settlement agreement.

c. On-Site Considerations

Impacts related to on-site tenants and their employees will become more of a focal point as the project reaches implementation and construction stages. This report outlines socially-related elements which should be considered in project implementation. First, the Estate intends to lease parcels in the Kapolei Business-Industrial Park (personal communication with Susan Sublett, Asset Manager, The Estate of James Campbell, October 25, 1989). Second, public regulation will mandate certain standards to ensure employee safety. Further, Navy officials (based on meeting held on October 31, 1989) suggested that structural measures may be needed to protect industrial employees from noise pollution, particularly if structures are built right up to the maximum envelope permitted by the settlement agreement reached in January 1989.

B. AGRICULTURAL IMPACT
(See Appendix J)

The development of Kapolei Business-Industrial Park would result in the urbanization of 552.01 acres of land owned by the Estate of James Campbell, of which about 145 acres are in sugarcane that is being cultivated by Oahu Sugar Company and 10 acres for a tree farm operated by Campbell Estate. The land is presently designated State Agriculture. An Agricultural Impact Study, prepared by Decision Analyst Hawaii, is included in Appendix J. The impact of this conversion on O'SoCo and the potential growth of diversified agriculture is summarized below. For a discussion of these impacts in response to comments received from the State Department of Agriculture, please refer to Chapter XV (Blue Section).

- 60 -
Environmental Impact Statement

KAPOLEI BUSINESS-INDUSTRIAL PARK

The affected acreage consists primarily of three soil types:

CR Coral Outcrop

EmA Ewa silty clay loam, moderately shallow, 0 to 2 percent slopes.

MnC Mamala stony silty clay loam, 0 to 2 percent slopes

For each soil type, Table 2 shows the approximate acreage, possible agricultural uses, and two soil ratings. The soils within the petition area have been rated in terms of four classification systems commonly used in Hawaii:

1) Land Capability Groupings,
2) Agricultural Lands of Importance to the State of Hawaii,
3) Overall Productivity Rating, and
4) Proposed Land Evaluation and Site Assessment.

1. Classification System

The classification systems are discussed below:

Land Capability Grouping by the United States Department of Agriculture Soil Conservation Service (SCS)

This classification system rates soils according to eight levels, ranging from the highest classification level, I, to the lowest level, VIII. Assuming that the land is irrigated, these ratings are shown in Table 2. As mentioned above, soil type CR, coral outcrop, covers over 86 percent of the project area, and has a land capability rating of VIIIs, which indicates that the soil has severe problems which make it generally unsuited for agriculture. Soil type MnC, which covers about 13 percent of the project area, has a land capability rating of IIIs, which indicates that the soils have severe limitations that reduce the options on plants, require special conservation practices, or both. Soil type EmA which covers about 1 percent of the proposed project area has a land capability rating of IIIs, which indicates that the soils have moderate limitations that reduce the choice of plants that can be grown successfully, or indicates that moderate conservation practices are required. The subclassification 's' indicates that the limitation is due to stoniness, unfavorable texture, shallowness, or low water-holding capacity.
Environmental Impact Statement

**KAPOLEI BUSINESS-INDUSTRIAL PARK**

### Table 1

**PROPOSED KAPOLEI BUSINESS-INDUSTRIAL PARK: SOIL TYPES, ACREAGE, AGRICULTURAL USES, AND SCS AND LESA RATINGS**

<table>
<thead>
<tr>
<th>Soil Type</th>
<th>Acreage</th>
<th>Agriculture Uses</th>
<th>SCS Rating</th>
<th>LESA Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>CR</td>
<td>472</td>
<td>None</td>
<td>VIII 5</td>
<td>12</td>
</tr>
<tr>
<td>MnC</td>
<td>73</td>
<td>Sugarcane, Truck Crops, Pasture</td>
<td>III 5</td>
<td>66</td>
</tr>
<tr>
<td>EmA</td>
<td>7</td>
<td>Sugarcane, Truck Crops, Pasture</td>
<td>II 5</td>
<td>74</td>
</tr>
</tbody>
</table>

1. Assuming that the soils are irrigated, except for CR which is coral outcrop.


**Agricultural Lands of Importance in the State of Hawaii (ALISH), by the SCS, University of Hawaii (UH) College of Tropical Agriculture and Human Resources, and the State of Hawaii, Department of Agriculture.**

This system classifies lands into three categories: (a) "Prime" agricultural land which is land that is best-suited for the projection of crops because of its ability to sustain high yields with relatively little input and with the least damage to the environment; (b) "Unique" agricultural land which is non-prime agricultural land that is currently used for the production of specific high-value crops; and (c) "Other" agricultural land which is non-prime and non-unique agricultural land that is of importance to the production of crops. Most of the soils in the proposed development are poor and, correspondingly, most of the area is not rated in the ALISH classification system. However, the area that has been planted in sugarcane has soils that are rated as "Other".

**Overall Productivity Rating, by the UH Land Study Bureau (LSB)**

This classification rates soils according to five levels, with "A" representing the class of highest productivity and "E" the lowest. About 14 percent of the petition area has soils rated B, 21 percent are rated C, while remaining 65 percent is rated E.
Environmental Impact Statement
KAPOLEI BUSINESS-INDUSTRIAL PARK

Proposed Land Evaluation and Site Assessment (LESA) System, by the State of Hawaii Land Evaluation and Site Assessment Commission

Based on soil quality, location attributes, improvements, nearby activities, and land-use plans, the proposed LESA classification system would designate a sufficient amount of the better agricultural lands to meet projected agricultural goals. If the LESA classification approach were applied to the proposed site, about 14 percent of the designated lands would be termed "important agricultural lands" (IAL), which would include all lands having a LESA rating of 66 or higher, out of a possible total of 100. The ratings for each soil type are shown in Table 1. However, the designations could be changed based on a change in nearby activities and a change in County land-use plans. Also, the designation could be changed if an overriding public benefit were demonstrated.

These soil-rating systems suggest that about 15 percent of the soils are considered good, but not high quality, and that the remaining 85 percent are poorly suited for agriculture.

2. Impact on OSCo

Assuming that U.S. sugar prices will continue to be high enough to justify continued sugar operations in Hawaii, an important question is whether Kapolei Business-Industrial Park — combined with other planned and proposed projects — would eventually cause the closing of OSCo, by reducing sugarcane acreage sufficiently to reduce economies of scale, and/or by contributing to a scattered and therefore inefficient plantation rather than a more compact and efficient one.

Assuming further that all proposed projects will be approved, and that it would take about 20 years to realize the full development of all projects, OSCo would retain about 11,490 acres under cultivation in the mid-1990s when its leases expire. If the average yield for the plantation were to reach a very optimistic 17.9 tons per acre by the end of 1995 (which is not expected), then this would be sufficient land to maintain the historic level of production of 90,000 to 95,000 tons of raw sugar per year.

More realistically, if an average yield of 17.9 tons per acre is not achieved, or if the resulting form of the plantation proves to be inefficient for OSCo to run the plantation at its historic level of production, or if urbanization proceeds much more rapidly than projected, then a conversion from a two- to a one-mill operation would allow a smaller but still efficient operation. For this case, land requirements would be about 10,350 acres, assuming a more realistic yield of 14.5 tons per acre and production of about 67,500 tons per year. This would provide a buffer of 1,140 acres from which to assemble an efficient plantation; this figure is based on
Environmental Impact Statement

KAPOLEI BUSINESS-INDUSTRIAL PARK

11,490 acres remaining after projected urbanization (assuming approval of all planned and proposed projects), minus the estimated 10,350 acres required for a one-mill operation. If yields reach higher levels, then the buffer increases accordingly. It is uncertain whether or not attrition would be sufficient to accommodate the reduction in employment associated with a conversion to a one-mill operation.

In terms of the form of the plantation, the development of Kapolei Business-Industrial Park would conform to the preferred sequence for contracting the plantation, which is from the periphery of the plantation inward; lands at the site of the proposed development are a long trucking distance from the mill, soils are inferior to those of inland fields, and yields are generally lower than average. Also, Campbell Estate has coordinated and will continue to coordinate its developments so as to avoid unnecessary disruption of OSCo operations.

In summary, Kapolei Business-Industrial Park is not expected to threaten the economic viability of OSCo. In combination with other projects, however, the cumulative impact on OSCo would be significant, with the major impacts resulting from projects other than the Kapolei Business-Industrial Park. Although this impact is not expected to threaten the economic viability of OSCo before its leases expire in the mid-1990s, managing the survival of a shrinking plantation is expected to become increasingly difficult.

In the longer term, the site for the proposed development eventually will become isolated from the rest of the plantation as a result of the Villages of Kapolei and the City of Kapolei, both of which are in their initial stages of development. Consequently, if the project area were to remain with OSCo, it would become a "remnant and noncontiguous" property of the plantation, and the fields would be fallowed.

In addition, the future of OSCo is uncertain given the outlook for flat or declining sugar prices, and costs which generally increase with inflation. Furthermore, economic incentives may not favor renewal of the major leases. However, assuming continued operations, then at full development of all the planned and proposed projects (assuming approval of all projects), the amount of land under cultivation by OSCo would decline by nearly 5,800 acres, from 13,487 acres to about 7,700 acres (Table 3). This loss of acreage would likely require a switch to a one-mill operation in an effort to maintain economic viability. Furthermore, the average yield would have to reach an optimistic 19.5 tons per acre or more. Given currently available information, it is uncertain whether the form of the plantation -- whether or not Kapolei Business-Industrial Park is developed -- would allow viable operations.
TABLE 3
PLANNED AND PROPOSED DEVELOPMENTS
AFFECTING OSCo ACREAGE: 1989

<table>
<thead>
<tr>
<th>PROJECT</th>
<th>Sugarcane Acreage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kapolei Business-Industrial Park</td>
<td>145</td>
</tr>
<tr>
<td>Ewa Marina, Phase I (partially approved)</td>
<td>410</td>
</tr>
<tr>
<td>Ewa Marina, Phase II</td>
<td>367</td>
</tr>
<tr>
<td>Royal Kunia, Phases I (partially approved)</td>
<td>548</td>
</tr>
<tr>
<td>Royal Kunia, Phases II</td>
<td>838</td>
</tr>
<tr>
<td>Ewa Gentry (partially approved)</td>
<td>891</td>
</tr>
<tr>
<td>Villages of Kapolei, State of Hawaii (approved)</td>
<td>775</td>
</tr>
<tr>
<td>City of Kapolei, Campbell Estate</td>
<td>693</td>
</tr>
<tr>
<td>(partially approved)</td>
<td></td>
</tr>
<tr>
<td>Ko Olina Resort (approved)</td>
<td>281</td>
</tr>
<tr>
<td>Golf Course (J. Myers)</td>
<td>270</td>
</tr>
<tr>
<td>West Loch Estates, City and County</td>
<td></td>
</tr>
<tr>
<td>of Honolulu (approved)</td>
<td>195</td>
</tr>
<tr>
<td>Kunia Golf Course</td>
<td>190</td>
</tr>
<tr>
<td>Kapolei Knolls (partially approved)</td>
<td>55</td>
</tr>
<tr>
<td>Eventual Remnant Property</td>
<td>94</td>
</tr>
<tr>
<td>TOTAL</td>
<td>5,780</td>
</tr>
</tbody>
</table>

SOURCE: Applications and discussions with Oahu Sugar Co., Ltd.

3. Impact on Existing Diversified Agriculture Operation

The development of Kapolei Business-Industrial Park would eliminate the 10-acre tree farm which is currently operating in the area. However, production would be assumed by other nurseries in Hawaii.

4. Impact on the Growth of Diversified Agriculture

The development of Kapolei Business-Industrial Park on 145 acres of sugarcane land and the 10-acre tree farm, would eliminate the possibility of using these lands for diversified agriculture. However, it is extremely doubtful that the project would adversely affect the growth of diversified agriculture in Hawaii. There are four reasons for this assessment: (1) an extensive amount of prime-agricultural land and water has been freed from sugar and pineapple production because of past plantation closings and reductions in operations, with most of this land and water remaining available for diversified agriculture activities; (2) a very
Environmental Impact Statement
KAPOLEI BUSINESS-INDUSTRIAL PARK

real possibility exists that additional land and water will be freed from sugar production given that a number of plantations are not profitable; (3) most of the sugar operations would make their lands available for profitable replacement crops to the extent that such crops are available; and (4) compared to the available supply, a very small amount of land and water is required to grow proven and promising crops to achieve a realistic level of food and animal-feed self-sufficiency, and to increase exports.

In addition to most of the 100,000 acres that have been or will soon be released from sugar and pineapple production since 1968, a portion of the land now in sugarcane is being held awaiting the discovery of profitable replacement activities; this additional land forms part of the supply of prime agricultural land which is available to profitable diversified-agriculture crops, and amounts to over 80,000 acres.

The conclusion that a very small amount of prime-agriculture land and water is required to accommodate the growth of diversified-agriculture crops is based on the LESA projections, and not on the more realistic projections discussed in the Appendix J. Based on LESA analysis, less than 9,000 acres of prime agricultural land are required per 12-year period. However, land is being released from plantation agriculture at a rate which far exceeds the demand from diversified agriculture. Furthermore, a rapid growth of diversified agriculture would accelerate the release of land from sugar operations since most plantations are searching for profitable replacement crops.

The increasing availability of prime agricultural land in Hawaii is part of very long-term and accelerating trends occurring throughout most developed and developing market economies. Productivity and yields have been increasing faster than population growth. This situation requires that labor, land, and other resources be gradually withdrawn from agriculture in order to maintain balanced markets and to increase farm income for those who remain.

5. Consistency with State and County Plans

Since the development of Kapolei Business-Industrial Park is not expected to adversely affect the economic viability of OSCo before the major leases expire in the mid-1990s, conforms to the preferred sequence for contracting the plantation, would not adversely affect the economic viability of OSCo in the longer term since the property will become an isolated remnant of the plantation as a result of other development projects, and would not limit the growth of diversified agricultural lands are available elsewhere, the proposed project is consistent with the major thrust of the agricultural portion of the Hawaii State plan, the State Agriculture Functional Plan, and the General Plan of the City and County of Honolulu. This thrust in all three plans calls for preserving the economic viability
Environmental Impact Statement

KAPOLEI BUSINESS-INDUSTRIAL PARK

of plantation agriculture and promoting the growth of diversified agriculture. Nevertheless, for about 15 percent of the project area, the development of the Kapolei Business-Industrial Park would be potentially inconsistent with the lower-level State agricultural guidelines which call for Agricultural Lands of Importance to be protected from development.

Furthermore, Kapolei Business-Industrial Park would conform with State and County plans and policies in that it would provide public benefits in terms of employment and reduced commuting.

MITIGATIVE MEASURES

The phasing plan for the proposed project will allow O&Co to gradually reduce sugar cane acreage, rather than completely terminating cultivation at one time on the fields.

Regarding diversified agriculture, there are no mitigative measures proposed since there are no significant adverse impacts.

C. IMPACT ON STATE AND COUNTY FINANCES
(see Appendix K)

The impact of the proposed Kapolei Business-Industrial Park development on State of Hawaii and City and County of Honolulu finances was prepared by Decision Analysts Hawaii, Inc. The study has been included into this document as Appendix K and is summarized below.

IMPACT

The Kapolei Business-Industrial Park, which is proposed by The Estate of James Campbell, would offer a variety of light-industrial, maritime industrial, and commercial activities.

Currently, about 145 acres of the project site are in sugarcane that is cultivated by Oahu Sugar Company., 10 acres are used for a tree nursery operated by Campbell Estate, and a portion of the property is used by Hawaii Raceway Park. Most of the remaining property consists of coral stockpile created by the dredging of Barbers Point Harbor. Compared to the proposed Kapolei Business-Industrial Park, these operations represent a very low level of economic activity. For example, the 145 acres in sugarcane support only five field and mill jobs. Correspondingly, the tax revenues derived from the existing activities on the property are very small compared to that which would be generated by the proposed activity. In 1989, County property tax revenues were less than $60,000. State tax revenues are also low because the level of economic activity is low, sugar sales are exempt from excise taxes, and trees grown by the nursery operations are used on Campbell Estate's own property rather than being sold commercially and, therefore, are not subject to excise tax.
Environmental Impact Statement

KAPOLEI BUSINESS-INDUSTRIAL PARK

The State would net about $16.4 million from taxes on construction expenditures and, at full development, would net over $7.6 million per year from taxes on operations (see Table 4).

MITIGATIVE MEASURES

None necessary since the Kapolei Business-Industrial Park development would strengthen State and County finances by providing substantial net income.
Environmental Impact Statement

KAPOLEI BUSINESS-INDUSTRIAL PARK

Table 4
KAPOLEI BUSINESS-INDUSTRIAL PARK:
IMPACT ON STATE AND COUNTY FINANCES
(In 1989 Dollars)

<table>
<thead>
<tr>
<th>ITEM</th>
<th>AMOUNT</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAND AREA</td>
<td></td>
</tr>
<tr>
<td>Industrial</td>
<td>532.88 acres</td>
</tr>
<tr>
<td>Commercial</td>
<td>19.20 acres</td>
</tr>
<tr>
<td>Total Land Area</td>
<td>552.08 acres</td>
</tr>
<tr>
<td>FLOOR AREA (Mid Values)</td>
<td></td>
</tr>
<tr>
<td>Industrial</td>
<td>5,459,342 sq. ft</td>
</tr>
<tr>
<td>Commercial</td>
<td>232,723 sq. ft</td>
</tr>
<tr>
<td>Total Employment</td>
<td>5,692,065 sq. ft</td>
</tr>
<tr>
<td>DURATION OF CONSTRUCTION</td>
<td>35 years</td>
</tr>
<tr>
<td>OPERATING EMPLOYMENT</td>
<td></td>
</tr>
<tr>
<td>Industrial</td>
<td>5,070 jobs</td>
</tr>
<tr>
<td>Commercial</td>
<td>576 jobs</td>
</tr>
<tr>
<td>Total Employment</td>
<td>5,646 jobs</td>
</tr>
<tr>
<td>INCREASED PROPERTY TAX BASE</td>
<td></td>
</tr>
<tr>
<td>Industrial ($70 per sq. ft.)</td>
<td>$381.5 million</td>
</tr>
<tr>
<td>Commercial ($100 per sq. ft.)</td>
<td>$20.3 million</td>
</tr>
<tr>
<td>Total Assessed Property Value</td>
<td>$401.8 million</td>
</tr>
<tr>
<td>RENTS</td>
<td></td>
</tr>
<tr>
<td>Industrial Space ($0.75 per sq. ft. per month)</td>
<td>$49.1 million per year</td>
</tr>
<tr>
<td>Commercial Space ($1 per sq. ft. per month)</td>
<td>$5.6 million per year</td>
</tr>
<tr>
<td>Total Rents</td>
<td>$52.6 million per year</td>
</tr>
<tr>
<td>SALES</td>
<td></td>
</tr>
<tr>
<td>Wholesale ($125 per sq. ft. of industrial space)</td>
<td>$681.3 million per year</td>
</tr>
<tr>
<td>Retail ($175 per sq. ft. of commercial space)</td>
<td>$51.2 million per year</td>
</tr>
<tr>
<td>Total Sales</td>
<td>$732.5 million per year</td>
</tr>
<tr>
<td>COUNTY TAX REVENUES</td>
<td></td>
</tr>
<tr>
<td>Rollback Taxes (prior to development)</td>
<td>$1.5 million</td>
</tr>
<tr>
<td>Property Taxes, Full Development (59.45 per $1,000 of assessed value)</td>
<td>$3.9 million</td>
</tr>
<tr>
<td>Total County Tax Revenues</td>
<td>$5.4 million</td>
</tr>
<tr>
<td>STATE EXCISE TAX REVENUES</td>
<td></td>
</tr>
<tr>
<td>Construction Activity</td>
<td>$16.4 million</td>
</tr>
<tr>
<td>Full Operations</td>
<td></td>
</tr>
<tr>
<td>Wholesale Transactions (0.5%)</td>
<td>$3.4 million per year</td>
</tr>
<tr>
<td>Retail Sales and Rents (4%)</td>
<td>$4.2 million per year</td>
</tr>
<tr>
<td>Total Excise Tax Revenues</td>
<td>$7.6 million per year</td>
</tr>
</tbody>
</table>
V. PUBLIC SERVICES AND FACILITIES ASSESSMENT

This Chapter describes the public services and facilities in the area; its adequacies with respect to serving the needs of the proposed development; the need for improvements; and the necessary mitigative measures to ameliorate or reduce adverse impacts.

In reviewing this Chapter, the public is encouraged to refer to the following reports in the Appendix, which have been the major source of much of the information that follows:

<table>
<thead>
<tr>
<th>APPENDIX</th>
<th>REPORT</th>
<th>PREPARER</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>Kapolei Business-Industrial Park, Social Impact Assessment</td>
<td>Earthplan</td>
</tr>
</tbody>
</table>

A. TRANSPORTATION / TRAFFIC  
(See Appendix L)

A study to identify and assess future traffic impacts on Kalaeloa Boulevard resulting from the Estate of James Campbell's proposed Kapolei Business-Industrial Park was conducted by Pacific Planning & Engineering, Inc. The study also focused on proposed intersections along Kalaeloa within the project site (See Figure 2, Appendix L).

The Kapolei Business-Industrial Park will be located between Farrington Highway/H-1 Freeway to the north, James Campbell Industrial Park to the south, Barbers Point Harbor to the west and Barbers Point Naval Air Station to the east. Construction for the proposed project is expected to begin in 1992 with completion of construction and full occupancy expected by the year 2030.

Presently, Kalaeloa Boulevard, a divided highway, with two lanes running, generally, in a north-south direction, serves as the only roadway access into the existing James Campbell Industrial Park and Barbers Point Harbor from the H-1 Freeway at the Palailai Interchange.
Environmental Impact Statement  
KAPOLEI BUSINESS-INDUSTRIAL PARK

Malakole Road, running in an east-west direction, is the main access to the harbor and intersects Kalaeloa Boulevard at a stop-controlled cross intersection.

Barbers Point Harbor is currently under development to expand the existing maritime industrial site to accommodate the island's long-term waterborne commerce needs. The harbor expansion is expected to employ about 1270 people by the year 2005.

James Campbell Industrial Park is projected to have approximately 500 additional jobs by the year 2010. Additional land above Campbell Industrial Park has been zoned for development. A total of 315 acres zoned I-2 is expected to employ about 3380 people, while another 64 acres zoned I-3 is expected to employ about 220 people by the year 2030.

The Barbers Point Harbor, James Campbell Industrial Park, and currently zoned areas are future developments that will contribute traffic along Kalaeloa Boulevard.

Impacts to the facilities, such as the Palailai Interchange, caused by the project will be addressed in the Ewa Region Highway Transportation Master Plan.

The State and County government's decision to designate the area as the "Second Urban Center" will result in other future land developments for the Ewa Region, such as among others, the Villages of Kapolei, the City of Kapolei, Ko Olina Resort, Ewa Marina, Ewa Gentry, and Ewa Villages. The Ewa Region Highway Transportation Master Plan is being developed to identify roadway system improvements necessary to accommodate forecasted future traffic and allocate the cost of the improvements to the developers in the region.

Impact

Presently, drivers on Malakole Road experience very long delays (LOS E or F) (See Appendix A of Traffic Report for Definitions of Level of Service (LOS)) attempting to cross or turn left onto Kalaeloa Boulevard during the morning and afternoon peak hours.

By the year 2030, even without the proposed amendment area, the results of the analysis indicate that Kalaeloa Boulevard will not have the capacity to accommodate the forecasted traffic due to the expected volume of increased ambient traffic.

It is projected that drivers from minor streets will experience very long or extreme delays (LOS F) crossing or making left turns onto Kalaeloa Boulevard and the future second access road during the peak hours if the intersections are not signalized.
Environmental Impact Statement
KAPOLEI BUSINESS-INDUSTRIAL PARK

Mitigative Measures

Based on the traffic analysis, the following improvements will be made to mitigate the impact of increased traffic:

1. Signalize the future intersections along Kala'eo Boulevard when future traffic volumes meet signal warrants. See Figure 15.

2. By the year 2010, Kala'eo Boulevard will be widened to a six lane divided roadway between Malakole Road and the Palailai interchange. See Figure 16.

3. Provide a two-lane second access road through the Kapolei Business Industrial Park from Hanua Street to the proposed Kapolei Parkway, or alternatively to Kala'eo Boulevard. See Figure 15. Ultimately, the second access road will be expanded to a four-lane divided road between Malakole Road and the second access road entrance into the project site. Also, the intersections of the second access road with Malakole Road and the future roads D, C, B, and A will be signalized, when future traffic volumes meet signal warrants.

Based on the proposed preliminary phasing for the development of the Kapolei Business-Industrial Park (see Figure 14), the following improvements will be necessary during the following phases:

Phase 4: Kala'eo Boulevard will be widened from the existing 4-lane divided roadway to a 6-lane divided roadway from the Palailai Interchange to Malakole Road.

Roadway improvements along Kala'eo Boulevard within the project site will include exclusive left-turn lanes for maukabound vehicles at the intersections with Future Roads A, B, C, and D, and for makaibound vehicles at the intersections with Future Roads A, B, and C.

The intersections of Kala'eo Boulevard with Future Roads A, B, C, D and Malakole Road will also be signalized when future traffic volumes meet signal warrants.
Phase 8: The second access road leading into the Kapolei Business-Industrial Park to Malakole Road will be implemented to alleviate excessive traffic volumes along Kaeaoa Boulevard during the morning and afternoon peak hours. The second access road will be a 2-lane divided roadway with allowable expansion to a 4-lane divided roadway when traffic volumes warrant widening.

Exclusive left-turn lanes will be provided along the second access road for both mauka and makaibound vehicles at the intersections with Future Road A, B, C, D and Malakole Road.

The intersections of the second access road with Future Roads A, B, C, D and Malakole Road will be signalized when future traffic volumes meet signal warrants.

An exclusive right-turn lane will be provided for makaibound vehicles along Kaeaoa Boulevard at the intersection with Future Road A. Exclusive right-turn lanes along Kaeaoa Boulevard will also be provided for makaibound vehicles at the intersections with Future Roads C and D. The existing through lane will be restrped to provide exclusive right-turn lanes into Future Roads C and D."

Future Roads A, B and C will be 2-lane roadways. Future Road D will be a 4-lane roadway from Kaeaoa Boulevard to Barbers Point Harbor. Exclusive left-turn lanes will be provided for eastbound vehicles at the intersections of Future Roads A, B, C and D with Kaeaoa Boulevard and the second access road. Exclusive right-turn lanes will also be provided for westbound vehicles at the intersections of Future Roads A, B, and C with Kaeaoa Boulevard and the second access road. Future Road D will be provided with a separate right-turn lane for westbound vehicles at the intersections with the second access road.

Further improvements will be necessary to accommodate the traffic beyond the project site. These improvements will be identified in the Ewa Region Highway Transportation Master Plan currently underway as a joint effort between Campbell Estate, Ewa region developers, and agencies of the State of Hawaii and the City and County of Honolulu.

B. WATER
(See Appendix A)

The existing James Campbell Industrial Park (JCIP) is currently served by 24-inch and 20-inch Board of Water Supply (BWS) mains in Kaeaoa Boulevard to Malakole Road. Within Malakole Road, a 20-inch main runs toward the Harbor, with a 16-inch main heading toward Barbers Point
Environmental Impact Statement
KAPOLEI BUSINESS-INDUSTRIAL PARK

Naval Air Station. It is estimated that the existing JCIP has an average daily water demand of approximately 5.2 MGD, with maximum daily demands and peak hour demands of 7.1 and 12.2 MGD respectively.

The Estate of James Campbell is a member of the Ewa Plain Water Development Corporation, which was established to assess the water system requirements and coordinate the improvements for all of the developments in the Ewa Plain. The Ewa Water Master Plan by Belt, Collins & Associates identifies the required infrastructure to serve the development, including the business-industrial park.

According to the Board of Water Supply (BWS), the transmission mains servicing the JCIP were sized according to generalized demands and site locations as indicated in the Ewa Water Master Plan, which serves primarily as a general planning document. To determine whether the existing mains are adequate to meet the project’s demands, BWS will require the preparation of detailed water master plans for the development.

Impact

The anticipated water demands for the amendment area and the entire Kapolei Business-Industrial Park are shown below. Initial review of the Ewa Water Master Plan and a preliminary hydraulic analysis using data from the master plan as the basis, indicates that the 24-inch and 20-inch mains in Kalaeleo Boulevard should be able to accommodate demands from the proposed project. A water master plan for the project will be prepared and submitted to the Board of Water Supply for their review and approval.

<table>
<thead>
<tr>
<th>POTABLE WATER (MGD)</th>
<th>NONPOTABLE WATER (MGD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average</td>
<td>Max</td>
</tr>
<tr>
<td>Amendment Area</td>
<td>0.78</td>
</tr>
<tr>
<td>Kapolei Business-Industrial Park</td>
<td>1.32</td>
</tr>
</tbody>
</table>

The offsite water system will be adequate to service the initial development of the business-industrial park as well as the other planned developments in the Kapolei area. Ultimately, however, additional improvements to the regional water system will be required.
Mitigative Measures

The following mitigative measures will be implemented:

1. A detailed water master plan will be submitted to BWS for review and approval.

2. A dual water system using potable water for domestic uses and nonpotable water for irrigation and other nonconsumptive uses will be used. According to BWS’s design criterion for dual systems in industrial areas, the potable water requirements are reduced by approximately 65 percent. The nonpotable infrastructure requirements are currently being studied and will depend on the location and quality of the nonpotable source.

3. 12- and 16-inch water lines will serve the potable water and fire protection requirements. The system will be designed in accordance with BWS standards.

4. Offsite improvements are identified in the Ewa Water Master Plan, including a parallel main in Farrington Highway from the Hoouliuli booster station near Kunia Interchange to Maiakilo, storage tanks and additional pump requirements. Six wells (5 already in existence and the 6th near completion) will supply 6.7 million gallons of potable water. Additional sources of potable water are being investigated to meet the demands of the developments in the Ewa/Kapolei area, including the State’s demonstration desalination plant.

Implementation of the offsite improvements will be governed by development schedules of all the proposed projects and will be coordinated by the Ewa Plain Water Development Corporation.

C. WASTEWATER

(See Appendix A)

There are no existing wastewater facilities currently within the project site. Cesspools service tenants in the neighboring James Campbell Industrial Park. The existing Segment 1 of the Ko Olina interceptor from Kalaheo Boulevard to Barbers Point Access Road has accounted for flows from Campbell Estate’s proposed Kapolei City project. It is anticipated that the initial development of the Kapolei Business-Industrial Park can share in the allotment for Kapolei City. Ultimately, a relief sewer parallel to Segment 1 of the Ko Olina interceptor will be required.

Honouliuli Wastewater Treatment Plant (WWTP) (25 mgd capacity) is the nearest municipal treatment facility and is currently being revised to
Environmental Impact Statement
KAPOLEI BUSINESS-INDUSTRIAL PARK

include all of Campbell Estate's development in the area as well as Kapolei Villages and Kapolei Knolls. Coordination with all the affected parties is ongoing at this time. The remaining capacity at this facility is committed; however plant expansion to 38 mgd is anticipated in 1994.

Impact

Wastewater generated from the Kapolei Business-Industrial Park is expected to be mainly of domestic composition, with some industrial discharges. Construction of pretreatment facilities will be required if industries are unable to meet City and County of Honolulu pretreatment standards prior to disposal into municipal sewers. The total development is expected to generate average wastewater flows of 5.5 mgd, with peak design flows expected to reach 15 mgd. The amendment area is anticipated to generate average flows of 2.2 mgd and peak flows of 6.8 mgd.

Mitigative Measures

Management of the wastewater flows from the proposed development will be required to prevent negative health and environmental impacts. An underground collection system discharging to the Honouliuli WWTP is the proposed wastewater management scheme. Major elements of the onsite system are conceptually shown on Figure 2 of Appendix A. In the event the proposed Kapolei Business-Industrial Park precedes the anticipated completion of the Honouliuli WWTP expansion, a temporary onsite treatment facility (shown on the Ewa Development Plan Public Facilities Map) was proposed as an interim alternative. However, the issue of temporary treatment facilities to serve projects in the Ewa Plain is still under review by the State Department of Health.

D. SOLID WASTE AND DISPOSAL
(See Appendix A)

The existing business-industrial park site does not generate solid wastes, with the exception of Hawaii Raceway Park, which is located in the portion of the amendment area east of Kalaeloa Boulevard. Currently, tenants of the existing industrial park are serviced by private refuse collection companies, with the solid wastes being disposed of at the Waipahu incinerator.

Impacts

The proposed project will generate additional solid waste from the area. Private refuse collectors will service the development.
E. DRAINAGE
(See Appendix A)

The project area is designated as Zone D on the Flood Insurance Rate Map (FIRM), and area of undetermined, but possible, flood hazards (see Figure 10). The designation does not require regulation under the Flood Hazard District (Ordinance No. 80-62) of the LUO.

The site of the proposed Kapolei Business-Industrial Park in Ewa, Oahu, is relatively flat and scattered with mounds and depressions. Elevations range from 5 to 75 MSL, with slopes of 0.5 to 5 percent. There are no existing drainage improvements within the site. Runoff generated from the site and adjacent areas drains overland via sheet flow and small ditches to onsite depressions. With the exception of major storms, very little runoff is generated under existing conditions due to the agricultural use and infiltration characteristics of the soil. Estimated runoff for the amendment area under existing conditions ranges from 859 cfs for a 10-year, 1-hour storm to 1,262 cfs for a 100-year, 1-hour storm.

Impact

The proposed development will alter the character of the site by replacing existing vegetative cover with buildings, pavement, landscaped area, and other improvements normally associated with industrial developments. Peak runoff generated onsite, as a consequence of the proposed development, is expected to increase. Estimated runoff for the amendment area under developed conditions ranges from 1,141 cfs for a 10-year, 1-hour storm to 1,750 cfs for a 100-year, 1-hour storm.

Without proper mitigative measures, major flooding problems could result due to the flat slopes found within the project site. Flooding may not be limited to the proposed Kapolei Business-Industrial Park site but could also reach the existing industrial park makai of the amendment area.
Mitigative Measures

The major element of the proposed drainage improvements is a large drainage channel running through the Kapolei Business-Industrial Park site from the railroad right-of-way to the ocean (see Figure 3, Appendix A). Implementation of an underground onsite drainage system of catch basins/manholes and pipe culverts, with conveyance to the proposed drainage channel is intended to alleviate current flooding problems and prevent flooding resulting from runoff from the proposed development. The major drainage channel will be sized to accommodate runoff from the entire watershed based on the City and County of Honolulu’s Storm Drainage Standards. A portion of the channel will encroach into the conservation district (shoreline) and SMA area requiring preparation of an environmental assessment to obtain various permits. The portion of the channel requiring the permits falls outside of the amendment area. A supplemental EIS is being prepared for the drainage channel which will address flows and potential impacts on coastal water quality and marine biota. The analysis will consider adjacent developments.

F. SOIL EROSION
(See Appendix A)

The entire site is expected to be graded in increments of not more than 15 consecutive acres at a time. These increments will be undertaken according to a phasing plan for the development. The preliminary phasing plan for the development is indicated on Figure 14.

Soil Erosion

The Kapolei Business-Industrial Park site is divided into six subareas for the purpose of calculating soil erosion potential. The offsite watershed is divided into four subareas for calculation of soil erosion potential. The subareas are illustrated in Figure 8 of Appendix A.

The U.S. Department of Agriculture, Soil Conservation Service, uses the Universal Soil Loss Equation (USLE) to estimate erosion on forest land, farm fields, construction/development sites, and other areas.

The existing soil erosion potentials for each subarea are listed below:
Environmental Impact Statement
KAPOLEI BUSINESS-INDUSTRIAL PARK

SOIL EROSION POTENTIAL

<table>
<thead>
<tr>
<th>Subarea</th>
<th>Existing Conditions (tons/year)</th>
<th>After Development (tons/year)</th>
<th>Reduction After Development (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>82</td>
<td>14</td>
<td>83</td>
</tr>
<tr>
<td>B</td>
<td>567</td>
<td>48</td>
<td>92</td>
</tr>
<tr>
<td>C</td>
<td>69</td>
<td>8</td>
<td>88</td>
</tr>
<tr>
<td>D</td>
<td>173</td>
<td>8</td>
<td>95</td>
</tr>
<tr>
<td>E</td>
<td>141</td>
<td>17</td>
<td>88</td>
</tr>
<tr>
<td>F</td>
<td>230</td>
<td>39</td>
<td>83</td>
</tr>
<tr>
<td>1</td>
<td>98,600</td>
<td>42,835</td>
<td>57</td>
</tr>
<tr>
<td>2</td>
<td>112,582</td>
<td>45,343</td>
<td>60</td>
</tr>
<tr>
<td>3</td>
<td>255,897</td>
<td>174,360</td>
<td>32</td>
</tr>
<tr>
<td>4</td>
<td>14,477</td>
<td>2,013</td>
<td>86</td>
</tr>
<tr>
<td>5</td>
<td>811</td>
<td>73</td>
<td>92</td>
</tr>
<tr>
<td>Total Amendment Area a</td>
<td>718</td>
<td>70</td>
<td>90</td>
</tr>
<tr>
<td>Total KBIP Development b</td>
<td>1,262</td>
<td>134</td>
<td>89</td>
</tr>
<tr>
<td>Total Watershed c</td>
<td>482,437</td>
<td>264,624</td>
<td>45</td>
</tr>
</tbody>
</table>

a. Subareas A, B, C
b. Subareas A,B,C,D,E,F,
c. Subareas 1,2,3,4,5

Long Term Impacts

Based on the USLE, the soil erosion potential of the amendment area, the entire Kapolei Business-Industrial Park development, and the entire watershed should decrease after development. This decrease in soil erosion is due to the reduction of erodible surfaces (increase in buildings and pavement); reduction of length and slope of overland flow due to site grading and construction of storm drain system; and increase in landscaped areas (reduction of bare ground).

Short Term Impacts

Construction will involve land disturbing activities that result in soil erosion. These land disturbing activities include removal of existing vegetation (clearing and grubbing), leveling, removing and replacing soil.

The USLE can be used to estimate soil erosion potential based on these short-term construction impacts. For purposes of calculation,
Environmental Impact Statement

KAPOLEI BUSINESS-INDUSTRIAL PARK

it is assumed that the areas will be exposed for a period of two years.

In the short-term, an estimated 10,141 tons per year of soil erosion may result from the development of Kapolei Business-Industrial Park during the grading period.

Mitigative Measures

Mitigative measures can be implemented to reduce short-term soil erosion. For example, grading will be limited to not more than 15 consecutive areas at a time and seeding half of the area will reduce soil erosion for the site by 53 percent to 5,375 tons per year. Additional erosion control measures will be followed to lessen construction impacts even further, such as:

1. Minimize time of construction

2. Retain existing ground cover until latest date before construction.

3. Early construction of drainage control features.

4. Use of temporary area sprinklers in nonactive construction areas when ground cover is removed.

5. Station water truck on site during construction period to provide for immediate sprinkling, as needed, in active construction zones (weekends and holidays included).

6. Use of temporary berms and cut-off ditches, where needed, for control of erosion.

7. Thorough watering of graded areas after construction activity has ceased for the day and on weekends.

8. Sod or plant all cut and fill slopes immediately after grading work has been completed.

9. Other measures that may be recommended by appropriate government agencies in the review of the grading and erosion control plans for compliance with Chapter 23, Revised Ordinances of Honolulu.

G. ELECTRICAL AND COMMUNICATIONS
   (See Appendix A)

The majority of the proposed business-industrial park site is currently not served by Hawaiian Electric Company (HECO) and Hawaiian
Environmental Impact Statement

KAPOLEI BUSINESS-INDUSTRIAL PARK

Telephone Company (HawTel). Only the raceway park, occupying a portion of the amendment area east of Kalaefo Boulevard requires electrical and telephone service. HECO and HawTel provide service to the existing industrial park as well as to the adjacent developers of Ko Olina. An existing HECO CEIP substation is located within the amendment area, adjacent to the railroad right-of-way and west of Kalaefo Boulevard. HECO also has fuel oil line easements along Malakole Road and existing and future 138kV and 12kV overhead lines on wood and steel poles within the project area.

Impacts

The proposed Kapolei Business-Industrial Park will place additional demands on the utility systems. For planning purposes, HECO has indicated that electrical unit loads for industrial developments may range from 100 KVA/acre to 150 KVA/acre. Based on information provided by HECO, the projected load requirements are estimated at 93.1 to 139.6 MVA for the entire business-industrial park and 55.2 to 82.8 MVA for the amendment area. HECO has further advised that easements may be required in those cases where the proposed roads are not aligned in such a manner to accommodate the overhead lines.

Mitigative Measures

Preliminary consultations with HECO and HawTel indicate that service can be provided to the project. Project requirements will be coordinated with HECO and HawTel.

Energy efficiency design guidelines will be developed by the Applicant as part of Conditions, Covenants and Restrictions that will apply to the development of the project site. These "guidelines" will be submitted to the Energy Division, State Department of Business and Economic Development for its review and input. Some of the energy-type measures that will be included in the guidelines, among others, are:

- Use of time switch type or occupant-sensing light and air-conditioning controls.
- Use of high-efficiency air conditioners.
- Use of heat pumps and solar heating systems.
- Promote energy-saving opportunities through innovative architectural design of buildings.
Environmental Impact Statement
KAPOLEI BUSINESS-INDUSTRIAL PARK

H. POLICE PROTECTION
(See Appendix I)

The project site is in District III, which extends from Red Hill to Kaena Point and Kipapa Ridge and is handled by the Pearl City Police Station.

Currently, three shifts of two police officers are dispatched to each beat in a 24-hour period. Police officials have recently added another beat --326a -- which will cover the western side of Fort Weaver Road. Funds for staffing this new beat have already been released and the beat will be operational before July 1990. Long-term plans include adding a new full-service station in Kapolei, with the establishment of Ewa as a new district (personal communication with Lieutenant Melvin Chastain, Administrative Lieutenant for District III, Pearl City Police Station, October 20, 1989).

Given the long term goal of upgrading police facilities in Kapolei, the proposed project is anticipated to be adequately served by existing and proposed facilities.

I. FIRE PROTECTION
(See Appendix I)

The nearest fire station is located in Makakilo, which has a single engine company with five fire fighters working in a 24-hour period. Backup for the general vicinity is provided primarily by the Waipahu Fire Station, and secondarily by facilities in Ewa Beach and Nanakuli.

The Fire Department is currently planning a number of improvements to accommodate the increasing population. These include the relocation of the Ewa Beach Fire Station; a new engine company at Terney Village; a Kapolei engine-and-ladder company; a Ko Olina engine-and-ladder company; and a fire station in the Kapolei Business-Industrial Park, near the southeastern boundary of the amendment area (based on information provided by Captain Gordon Mahiko, Administrative Services, Honolulu Fire Department, November 2, 1989, and the Ewa Development Plan Public Facilities Map). The engine companies will have five fire fighters working in a 24-hour period; the engine-and-ladder companies, eleven fire fighters. These improvements and new facilities are in preliminary stages at this time.

The existing and proposed fire protection facilities are anticipated to be adequate to serve the Kapolei Business-Industrial Park (personal communication with Captain Gordon Mahiko, Administrative Services, Honolulu Fire Department, November 2, 1989).

J. SCHOOLS

Not applicable to this project.
K. PARKS AND RECREATION FACILITIES

The proposed project is not anticipated to impact on recreational sites and facilities.

L. EDUCATION AND CHILD CARE

(See Appendix I)

The proposed project will not house permanent residents and is therefore not expected to impact the educational facilities in the area.

The project may require child care services because of the number of on-site jobs generated by the proposed uses. The extent of this requirement depends on, first, the availability of other child care facilities which can serve employees of the proposed project and, second, the actual employee requirements and preferences expressed when the facility is in operation.

Currently three sites have been committed for child care facilities: West Loch and Royal Kunia both have a 5.3 acre site for a park-and-ride facility with a 30,000 square-foot child care center. Ko Olina has one acre for child care and other public facilities. In addition, three potential child care centers are being explored in Kapolei. At present, there is no rule of thumb in projecting child care needs and requirements for specific development proposals have been determined on a case-by-case basis. Based on historic trends, child care providers generally expect that ten percent of the eligible on-site employee population will choose employer-sponsored child care services. The eligible employees are typically those between the ages of 18 and 35. This low proportion of potential users is due to (1) the availability of family or relative child care services (used by half of the need group) and (2) the high cost of existing services. At the time of this writing, employer-sponsored child care programs are initiated primarily by the health and medical care profession. The various forms of employer-sponsored child care include (1) major subsidy of on-site care, (2) pre-tax employer contribution, and (3) direct voucher.

M. EMERGENCY AND MEDICAL FACILITIES

(See Appendix I)

Three hospitals are within reasonable travelling distance of the project site. The nearest is the St. Francis Hospital-West is located in the eastern portion of the Ewa Plains. The Kaiser Foundation Health Plan has a relatively new central hospital in Moanalua, and the Pali Momi Medical Center is located near the Pearl Ridge Shopping Center. In addition, the area contains numerous medical clinics and doctors' offices.

As Kapolei City progresses, additional medical facilities will be required to serve the increased population. The proposed project is expected to be adequately served by the existing and additional medical facilities.
Environmental Impact Statement

*KAPOLEI BUSINESS-INDUSTRIAL PARK*

Emergency services are provided by City ambulances located in Aiea. Further, the Waipahu Fire Station contains an ambulance unit which serves Pearl City, Waipahu, Ewa Beach, Makakilo and parts of Waianae. Also, eight-hour service is provided to the Makakilo Fire Station by the Waipahu unit. Twenty-four hour ambulance service at the Makakilo Fire Station is currently in the planning stage. The extent of emergency services required will depend on the types of activities at the Kapolei Business-Industrial Park, the degree of risk, and the number of employees (personal communication with Donna Maiava, Chief of Emergency Medical Service Systems Branch, State Department of Health, August 31, 1989).
VI. RELATIONSHIP TO LAND USE POLICIES AND REGULATIONS

This Chapter analyzes the relationship of the project with existing public plans, policies and controls of the State of Hawaii and the City and County of Honolulu.

A. FEDERAL

Barbers Point Harbor has been supported by the Federal Government since its inception in 1965 when the harbor was authorized by Congress. In 1982, the Corps of Engineers awarded a contract for approximately 50 million dollars to construct the first increment of the joint Federal-State harbor. Phase II is currently under construction and the planning process for Phase III has begun.

The provision to expand the existing maritime industrial site as proposed by the applicant supports the intent of the Federal Government to develop an operational harbor to accommodate Oahu’s long-term waterborne commerce needs.

Expanding the area for commercial and industrial services near the harbor will further increase the economical viability of the facility.

B. STATE OF HAWAII

1. Hawaii State Plan

The Hawaii State Plan (Chapter 226, Hawaii Revised Statutes, as amended) establishes a set of goals, objectives and policies which are to serve as long-range guidelines for the growth and development of the State. It provides a basis for determining priorities and allocating limited resources such as public funds, services, manpower, land, energy and water. It also seeks to assure the coordination of State and County plans, policies, programs, projects and regulatory activities. [Sec. 226-1, Hawaii Revised Statutes (HRS)]

The overall theme of the State Plan is (Sec. 226-3, HRS)

☐ individual and family self-sufficiency
☐ social and economic mobility
☐ community or social well-being

In this section, the proposed project is analyzed with respect to relevant State Plan goals, objectives and policies. The State’s goals address a strong, viable economy characterized by stability, diversity and growth; a physical environment characterized by
Environmental Impact Statement
KAPOLEI BUSINESS-INDUSTRIAL PARK

beauty, cleanliness, quiet, stable natural systems, and uniqueness; and the physical, social, and economic well-being for individuals and families in Hawaii. [Sec. 226-4, HRS]

The Hawaii State Plan objectives and policies that pertain most directly to the proposed Kapolei Business Park are listed below.

Sec. 226-5 Objectives And Policies For Population.

(a) It shall be the objective in planning for the State's population to guide population growth to be consistent with the achievement of physical, economic, and social objectives contained in this chapter.

(b)(1) Manage the population growth statewide in a manner that provides increased opportunities for Hawaii's people to pursue their physical, social, and economic aspirations while recognizing the unique needs of each county.

Comment: The project site is located in the Ewa Development Plan Area which includes Census Tracts 83 through 86.02. During the first five years of this decade, the Ewa Development Plan Area grew by 2.7 percent, for a population of 37,320. This growth was small when compared to the islandwide population growth of 6.7 percent.

The City General Plan targets growth for the Ewa Development Plan (DP) area. Based on State Series M-K projections of Oahu for the year 2010, Ewa's share of the population could be between 119,940 and 132,933 people. The project, although not providing a residential component should provide a substantial employment generator for the increased population expected in Ewa. The project offers job opportunities in the "second city" and supports current population distribution policies.

Sec. 226-6 Objectives And Policies For The Economy.

(a)(1) Increased and diversified employment opportunities to achieve full employment, increased income and job choice and improved living standards for Hawaii's people.

(a)(2) A steadily growing and diversified economic base that is not overly dependent on a few industries.

(b)(1) Expand Hawaii's national and international marketing, communication, and organizational ties, to increase the State's capacity to adjust to and capitalize upon economic changes and opportunities occurring outside the State.

- 86 -
Environmental Impact Statement

KAPOLEI BUSINESS-INDUSTRIAL PARK

(b)(2) Promote Hawaii as an attractive market for environmentally and socially sound investment activities that benefit Hawaii's people

(b)(3) Seek broader outlets for new or expanded Hawaii business investments

(b)(4) Expand existing markets and penetrate new markets for Hawaii's products and services

(b)(7) Encourage the formation of cooperatives and other favorable marketing arrangements at the local or regional level to assist Hawaii's small scale producers, manufacturers and distributors.

(b)(8) Encourage labor-intensive activities that are economically satisfying and which offer opportunities for upward mobility

(b)(9) Foster greater cooperation and coordination between the government and private sectors in developing Hawaii's employment and economic growth opportunities.

(b)(10) Stimulate the development and expansion of economic activities which will benefit areas with substantial or expected employment problems.

(b)(16) Foster a business climate in Hawaii -- including attitudes, tax and regulatory policies, and financial and technical assistance programs -- that is conducive to the expansion of existing enterprises and the creation and attraction of new business and industry.

Comment: The provision of industrial and commercial sites in this location will assist in providing job opportunities for expanding communities in Ewa, Central Oahu, and the Leeward Coast. Designated intensive commercial and industrial areas will provide broader outlets for new or expanded Hawaii businesses, expand existing markets and create new markets for products and services, encourage labor intensive activities, and help increase the State's capacity to adjust to and capitalize upon economic changes and opportunities occurring outside the State. The employment base for the area population is very limited. A broader choice of jobs will result from the proposed project with long term employment estimated at 5,646 workers or approximately 10.2 workers per acre at completion. The project will be of benefit to an area with substantial employment needs, and foster greater cooperation between government and the private sector. The provision of the industrial site for maritime uses adjacent to the new Barbers
Environmental Impact Statement

KAPOLEI BUSINESS-INDUSTRIAL PARK

Point Harbor represents cooperative and coordinated efforts between the State and the Applicant in improving and supporting the operational efficiency of the harbor. Availability of industrial and commercial lands at the proposed location at lower cost than currently extant in the area of Honolulu Harbor would contribute to an improved competitive position for Hawaii based businesses and would stimulate economic activity through a multiplier effect. Therefore, providing designated areas for industrial and commercial land and maritime activities will help foster a favorable business climate in Hawaii and promote Hawaii as an attractive market for environmentally and socially sound investment activities that benefit Hawaii's people.

Sec. 226-7 Objectives And Policies For The Economy - Agriculture

(a)(1) Continued viability in Hawaii's sugar and pineapple industries.

(a)(2) Continued growth and development of diversified agriculture throughout the State

(b)(6) Assure the availability of agriculturally suitable lands with adequate water to accommodate present and future needs.

(b)(8) Expand Hawaii's agricultural base by promoting growth and development of flowers, tropical fruits and plants, livestock, feed grains, forestry, food crops, aquaculture, and other potential enterprises.

(b)(9) Promote economically competitive activities that increase Hawaii's agricultural self-sufficiency.

(b)(11) Institute and support programs and activities to assist the entry of displaced agricultural workers into alternative agricultural or other employment.

Comment: Of the approximately 552 acres presently in Agriculture, 260 acres are in sugar cane cultivation under a lease to Oahu Sugar Co (OSCo). This lease expires in 1995. The cane lands are on the periphery of the OSCo plantation. Areas not used for agricultural purposes generally contain coral and sand soils not suitable for raising crops.

Much of the soil is coral outcrop. Based on the various soil classification systems which rate Hawaii soils, little of the property has good soils from 0 to less than 25% depending on the particular soil rating system.

- 88 -
Environmental Impact Statement

KAPOLEI BUSINESS-INDUSTRIAL PARK

The loss of this site for agriculture purposes should not adversely impact the economic viability of agricultural production, and could serve as a means of promoting economically competitive activities that increase Hawaii's agricultural self-sufficiency, and provide alternatives to agricultural employment.

Sec. 226-10 Objectives And Policies For The Economy — Potential Growth Activities.

(b)(1) Facilitate investment and employment in economic activities that have the potential for growth such as diversified agriculture, aquaculture, apparel and textile manufacturing, film and television production, and energy and marine-related industries.

(b)(2) Expand Hawaii's capacity to attract and service international programs and activities that generate employment for Hawaii's people.

(b)(3) Enhance and promote Hawaii's role as a center for international relations, trade, finance, services, technology, education, culture, and the arts.

Comment: A designated commercial industrial and marine activities area will facilitate growth potential businesses by allowing shared amenities and compatible environments for commercial and industrial expansion. Well planned designated areas for these activities can help promote Hawaii as a center for business and commercial services, technology, and programs for national and international interests.

Sec. 226-11 Objectives And Policies For The Physical Environment — Land-based, Shoreline, And Marine Resources

(a)(2) Effective protection of Hawaii's unique and fragile environmental resources.

(b)(6) Encourage the protection of rare or endangered plant and animal species and habitats native to Hawaii.

Comment: No endemic lands and birds were recorded in the project area. The present environment, a generally flat coral bed terrain, provides a limited range of habitats utilized by the typical array of exotic birds generally found at this elevation and type of environment on Oahu. Unusual or distinctive habitat or fauna is not present.
Sec. 226-12 Objectives And Policies For The Physical Environment – Scenic, Natural Beauty, And Historic Resources.

(b)(1) Promote the preservation and restoration of significant natural and historic resources.

(b)(3) Promote the preservation of views and vistas to enhance the visual and aesthetic enjoyment of mountains, ocean, scenic landscapes, and other natural features.

Comment: Construction of Barbers Point Harbor and the stockpiling of dredged material removed from the harbor basin has altered a large part of the western portion of the project area. Extensive archaeological and paleontological salvage projects have been previously undertaken on much of the project site.

The height of the industrial structures will be well within the 60 foot height limit established by the Ewa Development Plan. Consideration will be taken to avoid structure heights causing any adverse impacts on coastal views, residential viewing corridors, or apartment areas mauka of the site. Freeway elevations will be taken into consideration along with finish grade of the property and the general building height limit of 60 feet. Urban design controls shall consider the overall visual effects of the proposed development as seen from off-site locations.

Sec. 226-13 Objectives And Policies For The Physical Environment - Land, Air And Water Quality

(a)(1) Maintenance and pursuit of improved quality in Hawaii’s land, air and water resources.

(b)(4) Encourage actions to maintain or improve aural and air quality levels to enhance the health and well-being of Hawaii’s people.

Comment: The applicant will be in compliance with applicable state, federal and county regulations relating to land, air and water resources in development of the project. Despite the large variety of industrial, agricultural, residential and military activity in the area air quality is currently in compliance with both state and federal ambient air quality standards based on the most recent State Department of Health monitoring data from its Barbers Point monitoring station.

The impact of local noise regulations (State, Department of Health and City and County of Honolulu LUO) will be addressed as well as OSHA noise regulations. Planned
industrial users are not anticipated to have any unusual sounds resulting from their activities. Possible noise impact from the project upon noise sensitive uses, e.g., stationary and mobile noise sources offsite the project area will be addressed.

Sec. 226-14 Objective And Policies For Facility Systems - In General

(b)(1) Accommodate the needs of Hawai'i's people through coordination of facility systems and capital improvement priorities in consonance with state and county plans

Comment: The project will conform to all existing state and county plans relating to facility systems coordination and capital improvement priorities.

Sec. 226-15 Objectives And Policies For Facility Systems – Solid And Liquid Wastes

(a)(1) Maintenance of basic public health and sanitation standards relating to treatment and disposal of solid and liquid wastes.

(a)(2) Provision of adequate sewerage facilities for physical and economic activities that alleviate problems in housing, employment mobility and other areas.

(b)(2) Promote re-use and recycling to reduce solid and liquid wastes and employ a conservation ethic.

Comment: Adherence to public health and sanitation standards relating to treatment and disposal of solid and liquid wastes, provision of adequate sewerage facilities for physical and economic activities and promotion of re-use and recycling to reduce solid and liquid wastes and employ a conservation ethic. Individual wastewater treatment systems such as cesspools and septic tanks are currently used by tenants of the industrial park to dispose of their sewage. The project area will be served by a sewer system and pump stations connecting to existing or proposed systems mauka of the industrial area, eventually discharging at the Honolulu Wastewater Treatment Plant (WWTP).

The Honolulu WWTP is currently near its 25 MGD capacity with the available capacity already committed. Plans are being prepared for the expansion of the plant to 38 MGD with completion tentatively scheduled by 1994.

The Development Plan Public Facilities Map for the proposed Kapolei City was recently amended to include a
Environmental Impact Statement
KAPOLEI BUSINESS-INDUSTRIAL PARK

temporary sewage treatment plant in the industrial area in
the event the Honolulu WWTP expansion is not completed
prior to development of the "second city". A temporary
treatment plant could be designed to accommodate Kapolei
Business Park as well as Kapolei City in the interim.

Private companies are currently used by tenants of the
existing industrial park to collect and dispose of solid waste.
It is anticipated that private companies will also handle the
solid wastes of the expansion area.

Sec. 226-16 Objective And Policies For Facility Systems -- Water

(b)(1) Coordinate development of land use activities with
existing and potential water supply

(b)(6) Promote water conservation programs and practices in
government, private industry and the general public
to help ensure adequate water to meet long-term
needs.

Comment: Development of the project will be coordinated
with existing and potential water supply, and will be
supportive of water conservation programs and practices in
private industry to help meet long-term needs.

The area is currently served by 24-inch and 20-inch mains in
Kalaaloa Boulevard. These mains were installed by the
Applicant and dedicated to the Board of Water Supply. The
two mains extend down Kalaaloa Boulevard to Malakole
Road where a 20-inch main runs toward the harbor and a 16-
inch main runs toward Barbers Point Naval Air Station.

Above the H-2 Freeway north of the project area is located a
nonpotable water system of wells and storage tanks. The
nonpotable water is intended to be used for irrigation, cool-
ing, and other nonconsumptive uses.

A dual water system is proposed for the Kapolei Business
Park. The existing water mains in Kalaaloa Boulevard are
intended to supply the potable water for the expansion areas.
Distribution lines will be located in the interior roadways to
service the lots.

A nonpotable water system for irrigation, cooling and other
nonconsumptive uses is being planned for the Kapolei Busi-
ness Park. Alternative sources of nonpotable water are being
investigated, including wells into the caprock aquifer at
various locations and the use of water from the State's
desalination plant being constructed by the Department of
Land and Natural Resources located adjacent to the project.
Environmental Impact Statement
KAPOLEI BUSINESS-INDUSTRIAL PARK

site. The plant is initially planned to process approximately 1 million gallons of brackish water per day.

Sec. 226-17 Objectives And Policies For Facility Systems – Transportation

(b)(4) Provide for improved accessibility to shipping, docking, and storage facilities.

(b)(6) Encourage transportation systems that serve to accommodate present and future development needs of communities.

(b)(8) Increase the capacities of airport and harbor system and support facilities to effectively accommodate transshipment and storage needs.

(b)(9) Encourage the development of transportation systems and programs which would assist statewide economic growth and diversification.

Comment: The intent of the proposed industrial project is among other things, to provide space for storage requirements as needed by the harbor uses. The proposed amendment to the Development Plan Land Use map is in full support of the above objectives. The Ewa Transportation Master Plan is being developed to identify roadway system improvements necessary to accommodate forecasted future traffic in the area.

The proposed development will provide opportunities for harbor oriented businesses as well as other industrial and commercial establishments. Approval of the development will insure that the federally and state supported harbor will be able to attract its share of the transportation related enterprises necessary to supplement Honolulu Harbor as the State’s ocean transportation center.

Availability of industrial land in proximity to the Barbers Point Harbor will contribute to a reduction of overland transportation costs. A significant amount of cargo currently arriving at Honolulu Harbor is bound for the Leeward area of Oahu.

Sec. 226-26 Objectives And Policies For Socio-cultural Advancement – Public Safety

(a)(1) Assurance of public safety and adequate protection of life and property for all people.

Comment: The project site is within Beat No. 325 of District III primarily served by the Pearl City main Station of the
Environmental Impact Statement

KAPOLEI BUSINESS-INDUSTRIAL PARK

Honolulu City and County Police Department. Back up service may be provided by personnel at the Waianae Police Substation. A new Police Station is being planned for the City of Kapolei.

A single engine fire station is located in Makakilo with back up provided by fire stations at Ewa Beach, Waipahu and Nanakuli. The Ewa Development Plan Public Facilities Map indicates a fire station on another parcel approximately one-half mile south of the Barbers Point Harbor.

Sec. 226-103 Economic Priority Guidelines

(a)(1) Seek a variety of means to increase the availability of investment capital for new and expanding enterprises

(a)(6) Encourage the formation of cooperatives and other favorable marketing or distribution arrangements at the regional or local level to assist Hawaii’s small-scale producers, manufacturers, and distributors.

(a)(9) Support and encourage, through educational and technical assistance programs and other means, expanded opportunities for employee ownership and participation in Hawaii business

(d)(5) Encourage and assist with the development of a waterborne and airborne freight and cargo system capable of meeting the needs of Hawaii’s agricultural community

Comment: The project should encourage investment capital for new and expanding enterprises, as well as create opportunities for favorable marketing or distribution arrangements at the regional or local level to assist Hawaii’s small-scale producers, manufacturers, and distributors. It can expand opportunities for employee ownership and participation in Hawaii business.

Sec. 226-104 Population Growth And Land Resources Priority Guidelines.

(a)(1) Encourage planning and resource management to insure that population growth rates throughout the State are consistent with available and planned resource capacities and reflect the needs and desires of Hawaii’s people.

(a)(3) Ensure that adequate support services and facilities are provided to accommodate the desired distribution of future growth throughout the State

- 94 -
(b)(1) Encourage urban growth primarily to existing urban areas where adequate public facilities are already available or can be provided with reasonable public expenditures and away from areas where other important benefits are present, such as protection of important agricultural land or preservation of lifestyles.

(b)(2) Make available marginal or non-essential agricultural lands for appropriate urban uses while maintaining agricultural lands of importance in the agricultural district.

Comment: The proposed project provides employment opportunities to accommodate population growth in the general area which has occurred consistent with available and planned resource capacities. Adequate support services and facilities are available from developed and/or to be developed areas adjacent to the project, and it will utilize largely marginal or non-essential agricultural lands.

2. State Functional Plans

The Hawaii State Plan directs the appropriate State agencies to prepare functional plans for their respective program areas. The plans set forth "...the policies, statewide guidelines and priorities within a specific field of activity, when such activity or program is proposed, administered, or funded by any agency of the State" [Section 226-2, HRS] Each functional plan contains objectives to achieved and policies to be pursued within the specified "functional" areas. The Hawaii State Plan directs that "...County general plans and development plans shall be taken into consideration in the formulation and amendment of the state functional plans" [Sec. 226-32(a) (par.3) HRS]

To date, fourteen Functional Plans exist. Relevant plans examined pursuant to this project include: Employment; Agriculture; Transportation; and Energy.

Employment Functional Plan (1989)

Objective IV. A: Improve Planning of Economic Development, Employment and Training Activities

Comment: This project will address the objective of improving the planning of economic development and employment centers. While residential expansion has been occurring in the central and leeward Oahu area, the movement of employment centers away from the Honolulu corridor has also been sought as a means of alleviating commuter traffic congestion from these outlying residential areas.
As noted above, the employment base in this area is very limited. A broader choice of jobs will result from the proposed project with long term employment estimated at 5,646 workers or approximately 10.2 workers per acre at completion. The project will be of benefit to an area with substantial employment needs, and foster greater cooperation between government and the private sector.

Agriculture Functional Plan (1987)

Objective: Achievement of productive agricultural use of lands most suitable and needed for agriculture.

Policy B(5): Provide greater protection to agricultural lands in accordance with the Hawaii State Constitution and the recommendations of the Land Evaluation and Site Assessment Commission.

Comment: The Land Evaluation and Site Assessment (LESA) Commission recommended streamlining the present land use regulatory system by reclassifying the Agricultural District into approximately 700,000 acres of "Important Agricultural Lands" and approximately 1.3 million acres of "Other Lands". The Hawaii State Plan priority guideline 226-104(b)(2) directs that marginal or non-essential agricultural lands be made available for urban uses while maintaining agricultural lands of importance in the Agricultural District.

Much of the project's area soil is coral outcrop. Based on the various soil classification systems which rate Hawaii soils, little of the property has good soils from 0 to less than 25% depending on the particular soil rating system. It is for the most part, marginal land for agricultural productivity.

While the proposed project may appear to conflict with certain Economic Priority Guidelines (Sec. 226-103, HRS) relating to Agriculture, the minimal productivity of the greater portion of the project area would not significantly impact on such priority guidelines as Sec. 226-103(c)(1) Provide adequate agricultural lands to support the economic viability of the sugar and pineapple industries; and Sec. 226-103(d)(1) Identify, conserve, and protect agricultural land of importance and initiate affirmative and comprehensive programs to promote economically productive agricultural and aquacultural uses of such lands.


Objective: Promote energy efficiency through land use and support facility systems planning.
Environmental Impact Statement
KAPOLEI BUSINESS-INDUSTRIAL PARK

Policy D(1): Wherever feasible, direct future urbanization into easily serviceable, more compact, concentrated developments next to existing urban areas.

Comment: The project area is located adjacent to existing industrial use areas and town centers. It would constitute an addition to an already compact, concentrated area of development with Campbell Industrial Park to the south, Barbers Point Harbor to the east, the City of Kapolei to the north, with Makakilo and the Villages of Kapolei beyond. Energy efficiency design guidelines will be developed, in consultation with DBED Energy Division, to encourage energy conservation in the development of the project site.

Transportation Functional Plan (1984)

Objective A: Development of a balanced, multi-modal statewide transportation system that serves clearly identified social, economic and environmental objectives of the Hawaii State Plan.

Policy A(1): Base transportation and transportation-related improvements on a cooperative, comprehensive, and continuing transportation planning process. Objective D: Develop and update harbor master plans which service statewide needs relating to the efficient, safe, and convenient movement of people and goods to accommodate planned growth objectives.

Policy D(2): Develop Barbers Point Deep Draft Harbor incrementally in order to supplement facilities at Honolulu Harbor.

Comment: The project contributes to the idea of a planned, balanced transportation system by providing centralized areas for common activities such as industrial and commercial parks. This can avoid unnecessary congestion resulting from scattered pockets of uncoordinated commercial-industrial transportation needs.

The development of Barbers Point Harbor depends in part on the development of its backup land area. The project can enhance the Harbor's volume of use by providing an affordable and accessible area specifically for maritime and intensive industrial and commercial businesses.

3. State Land Use Law

All lands in the State have been classified in one of four land use districts, Urban, Rural, Agricultural, and Conservation, by the State Land Use Commission, pursuant to Chapter 205, HRS. The subject property is in the Agricultural District. A petition will be
Environmental Impact Statement

KAPOLEI BUSINESS-INDUSTRIAL PARK

filed with the State Land Use Commission for a boundary change to redesignate the property for Urban use.

4. Hawaii Coastal Zone Management Program

The Hawaii Coastal Zone Management Program has established objectives and policies to protect, preserve, and where possible, restore or enhance the natural and man-made resources within the coastal zone, which includes the entire island of Hawaii except for the Forest Reserve areas. The program reviews federal programs, licenses, and permits, and state programs receiving federal funding for consistency with the state program. Consistency review of proposed actions is coordinated by the Office of State Planning. The proposed project furthers the objective of coastal zone management to improve water quality.

The site is not within the Special Management Area (SMA). The proposed use of the project is consistent with the present use of the general area where a harbor and industrial area already exists. The proposed project does not adversely impact any of the Coastal Zone Management (CZM) program objectives and policies. [Environmental assessment report]

C. CITY

1. General Plan

The proposed Ewa Development Plan Land Use Map Amendment relates to the Objectives and Policies of the City and County’s General Plan as follows:

Population

Objective C: To establish a pattern of population distribution that will allow the people of Oahu to live and work in harmony.

Policy 2: Encourage development within the secondary urban center at Kapolei and the Ewa and Central Oahu urban fringe areas to relieve development pressures in the remaining urban-fringe and rural areas and to meet housing needs not readily provided in the primary urban center.

Comment: The requested changes from Agriculture to Industrial and Commercial will further urbanize the area strengthening the concept of the Secondary Urban Center.

- 98 -
Environmental Impact Statement

KAPOLEI BUSINESS-INDUSTRIAL PARK

Economic Activity

Objective A: To promote employment opportunities that will enable all the people of Oahu to attain a decent standard of living.

Policy 1: Encourage the growth and diversification of Oahu's economic base.

Policy 2: Encourage the development of small businesses and larger industries which will contribute to the economic and social well-being of Oahu residents.

Policy 3: Encourage the development in appropriate locations on Oahu of trade, communications, and other industries of a non-polluting nature.

Objective D: To make full use of the economic resources of the sea.

Policy 2: Encourage the development of aquaculture, ocean research, and other ocean-related industries.

Objective G: To bring about orderly economic growth on Oahu.

Policy 1: Direct major economic activity and government services to the primary and secondary urban centers.

Policy 3: Maintain sufficient land in approximately located commercial and industrial areas to help ensure a favorable business climate on Oahu.

Comment: The project sites and intended uses support the above objectives and policies in several ways:

The proposed project area adjoins and will serve to expand and support the facilities at the Barbers Point Harbor, James Campbell Industrial Park and the proposed city of Kapolei. The industrial and commercial sites will provide employment and business development opportunities for the regional populations as well as suppliers and others servicing the secondary urban center.

Transportation and Utilities

Objective A: To create a transportation system which will enable people and goods to move safely,
Environmental Impact Statement

KAPOLEI BUSINESS-INDUSTRIAL PARK

... efficiently and at a reasonable cost, serve all people, including the poor, the elderly, and the physically handicapped, and offer a variety of attractive and convenient modes of travel.

Policy 13: Facilitate the development of a second deep water harbor to relieve congestion in Honolulu Harbor.

Comment: The proposed project will provide the Barbers Point Harbor area with additional nearby commercial and industrial acreage; thereby facilitating development of the Harbor area.

Physical Development and Urban Design

Objective A: To coordinate changes in the physical environment of Oahu to ensure that all new developments are timely, well designed, and appropriate for the areas in which they will be located.

Policy 5: Provide for more compact development and intensive use of urban lands where compatible with the physical and social character of existing communities.

Policy 7: Locate new industries and new commercial areas so that they will be well related to their markets and suppliers, and to residential areas and transportation facilities.

Objective C: To develop a secondary urban center in Ewa with its nucleus in the Kapolei area.

Policy 2: Encourage the development of a major residential, commercial, and employment center within the secondary urban center.

Policy 3: Encourage the continuing development of Barbers Point as a major industrial center.

Policy 5: Provide for more compact development and intensive use of urban lands where compatible with the physical and social character of existing communities.

Policy 7: Locate new industries and new commercial areas so that they will be well related to their markets and suppliers, and to residential areas and transportation facilities.
Environmental Impact Statement

KAPOLEI BUSINESS-INDUSTRIAL PARK

Objective C: To develop a secondary urban center in Ewa with its nucleus in the Kapolei area.

Policy 2: Encourage the development of a major residential, Commercial, and employment center within the secondary urban center.

Policy 3: Encourage the continuing development of Barbers Point as a major industrial center.

Policy 5: Cooperate with State and Federal governments in the development of a deep water harbor at Barbers Point.

Comment: The objectives and policies listed above are all applicable to the proposed commercial and industrial sites. The project will provide employment opportunities within the secondary urban center. It is compatible and appropriate for the area in which it is located, furthering the expansion of the area as a major industrial center. The site is close to markets and suppliers, and to residential areas and transportation facilities. Finally, the proposal will further the development of the harbor.

2. Development Plan

Common Provisions -- Section 8, Identification of Public Buildings, Public or Private Facilities for Utilities, Terminals and Drainage

Harbors: The water transportation system consists of publicly-owned commercial and recreational harbors, and launching ramp facilities.

Land uses directly supportive of marine activities may be allowed on harbor fast lands . . . For commercial harbors this may also include cargo handling and storage facilities, seafood processing plants, shipyards . . . maritime-related industrial activities, and other such uses.

Comment: The proposed project site will be used, in part, for maritime-related industrial activities.

Special Provisions -- Section 1, Area Description

The area description recognizes the intent to provide additional industrial sites in the project area with the following statement: "On the makai part of Barbers Point coral plains, the present industrial area may expand mauka."

- 101 -
3. Social Impact of Development

See Appendix I for consultant's report on the social impacts of the development. The assessment is summarized in Section IV.
### VII. PROBABLE ADVERSE ENVIRONMENTAL EFFECTS

<table>
<thead>
<tr>
<th>IMPACT</th>
<th>MITIGATING MEASURES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loss of Agricultural Lands:</td>
<td>The project area is partly under sugarcane cultivation by the Oahu Sugar Company (OSCo). Study prepared for this report indicates that the project is not expected to threaten the economic viability of OSCo nor the growth of diversified agriculture.</td>
</tr>
<tr>
<td>Traffic:</td>
<td>The developer will coordinate the phasing of the project with OSCo to avoid unnecessarily disrupting final cultivation/harvesting.</td>
</tr>
</tbody>
</table>

**Traffic:**

- Increased vehicular traffic will be generated in areas on and offsite the project area including Palailai Interchange.

  - Kalaaua Boulevard will require improvement and widening, including signalization at certain intersections. A second access road to and from the industrial park will be required as well as the creation of new intersections.

  - Further improvement will be necessary to accommodate the traffic beyond the study area. These improvements will be identified in the Ewa Region Highway Transportation Master Plan being prepared separate from this document.

  - Employment opportunities and economic activity for area residents will help reduce adverse regional traffic impacts.

### Construction:

- Clearing and construction work will result in temporary dust, noise and some traffic disruption.

  - The developer and its contractors will comply with local grading and subdivision ordinances, and with the regulations of the Department of Health.
Environmental Impact Statement
KAPOLEI BUSINESS-INDUSTRIAL PARK

Archaeological

Resources:
Land development within the area could result in destruction of archaeological and paleontological resources in the area.

Archaeological and paleontological resources were identified. Mitigative measures are proposed that will protect the resources for further research, identification, testing, data recovery, and/or preservation through acquisition by qualified parties.

Utilities:
Increased need for utility services, including city supplied water and sewer.

A dual water system is proposed using potable water for domestic uses and nonpotable water for irrigation and other non-consumptive uses. Improvement plans will be coordinated with the Ewa Plain Water Development Corporation and other appropriate agencies.

Water, sewer and drainage plans must be approved by appropriate public agencies.

Services:
Increased need for public services such as police and fire facilities.

An impact study on State and County finances indicates that the project will generate revenues exceeding expenditures. New fire station locations have been identified on the current DP Public Facilities Map. Added police stations are in the planning process.

Air Quality - Vehicular:
Under "worst-case" conditions some of the State's 1-hour and 8-hour standards may be exceeded in certain "hot spots."* Encouraging carpooling, mass transit use and implementation of an inspection/maintenance program could reduce vehicular emissions. Also, increasing highway capacity and encouraging use of public transportation would help reduce traffic-related adverse impacts. Air quality monitoring equipment is being purchased by the Estate of James Campbell and will be given to the State Department of Health.
Environmental Impact Statement
KAPOLEI BUSINESS-INDUSTRIAL PARK

Hazard – Slag Area:

An area of contaminant material exists on the property.

A site remediation plan is under review and discussion with the Environmental Protection Agency (EPA) and the State Department of Health (DOH).
VIII. ALTERNATIVES TO THE PROPOSED ACTION

The purpose of this Chapter is to describe and weight alternatives to the proposed development which can involve significant tradeoffs among the uses of available resources.

Three alternatives to the proposed Development were considered:

A. No-Action Alternative
B. Agricultural Alternative
C. Mixed Use Alternative

A. NO-ACTION ALTERNATIVE

The no-action alternative would result in essentially no changes to the project site for the foreseeable future. Sugar production is likely to continue on portions of the site, until at least 1995 when the lease to Oahu Sugar Company expires. Coral mining, likewise will continue until this resource has been depleted, which is expected sometime after the year 2000. The raceway park similarly is expected to remain in operation through the year 1991, or until the City Council finds a permanent facility (which could be the present site). Afterwards, the site is likely to become vacant.

With reference to environmental factors, the topography, soils, surface water, ground water, runoff, flood, vegetation and wildlife are not likely to change significantly. Also, existing traffic, noise, air quality, population, employment, archaeological resources, and utilities and services will not be affected.

The no-action alternative would create less environmental effect than the proposed action. However, the economic benefits generated by the proposed action, especially in terms of job opportunities, would not occur. Furthermore, the no-action alternative would be contrary to the concept of the Secondary Urban Center that designates Kapolei as its nucleus, as well as the Ewa Development Plan Special Provisions that recognizes the project area as a potential expansion of the industrial activity in the area.

B. AGRICULTURAL ALTERNATIVE

This alternative assumes that the land will be used for sugar production and/or subdivided into agricultural lots for diversified agriculture or for other uses permitted in the AG-1 and AG-2 Agricultural Districts of the Land Use Ordinance (LUA).

With the poor long term outlook for the sugar industry, and considering the amount of uncommitted acreage for diversified agriculture which
remains available at other locations more suitable for such operations, it is extremely doubtful that the land will be put to such uses, given the lease revenues derived from agriculture and the pressures for urbanization in Kapolei. Furthermore, soil conditions in many parts of the project area consist of coral outcrop, requiring considerable soil enrichment for agricultural purposes.

This alternative could also result in the likelihood of dwellings being built in this area, since the LUO permits "farm" dwellings in the agricultural districts. Although not likely, about 150 "farm" dwellings are possible. The subdivided lots could also be used for other uses in the LUO that are possible under a Conditional Use Permit process. Such uses include "storage and sales of seed, feed, fertilizer and other products essential to agricultural production; centralized bulk collection, storage, and distribution of agricultural products; sale and service of machinery use in agricultural production; saw mills; and group living facilities".

Interestingly, the above conditional uses are permitted principal uses in the zoning district that would implement the proposed action, except for "group living facilities". With reference to "group living facilities" and the "farm" dwellings that would permit under this alternative, the project area’s environmental setting is total incompatible with such uses and with the thrust of the General Plan that encourages the urbanization of the project area as an employment center for the Secondary Urban Center.

Environmentally, this alternative has the potential of greater impacts than the proposed action, e.g. necessary support facilities for the success of the Barbers Point Harbor would be jeopardized, needed support services for the commercial areas of Kapolei and the residents would go unmet, and employment so necessary to make the Secondary Urban Center a reality will be lost. In comparison, the no-action alternative would be a better option than this alternative.

C. MIXED USE ALTERNATIVE

This alternative proposes a mixture of industrial activities with commercial uses. This would allow the land to be used for commercial and/or industrial uses, enabling a broader tenant mix that could enhance the development of Kapolei Business-Industrial Park as a regional service/employment center. A mix of uses would be permitted throughout the Park rather than in the area specified for such uses. Such a designation would permit the land owner/developer much more flexibility in meeting market demands over the long term.

Although the mixed use alternative has considerable merit for use in the project area, the Land Use Ordinance specifically states (Section 5.110) that Industrial-Commercial Mixed Use Districts are "...not intended for widespread application, but only to those areas which have a history of mixing industrial uses with uses with other uses...". According to the Department of Land Utilization, the Ewa area does not meet this criteria,
and further there are concerns over how much land will be devoted to commercial versus industrial and the impact this has on the land supply for various uses (personal communication with Mr. Calvin Ching, Department of Land Utilization).

At the present time, the need for new industrial land is most critical. However, the Industrial-Commercial Mixed Use Concept remains an alternative for future consideration through subsequent development plan amendments, where the issues raised by the Department of Land Utilization can be fully addressed.

Environmentally, this alternative is not expected to have less nor more impacts than the impacts associated with the proposed action.

SUMMARY

The No-Action and the Agricultural Alternatives imply that the project remain and/or be developed for agricultural purposes. Continued farming operation within the project area would represent a significant change in policy that call for Kapolei to serve as the nucleus for the Secondary Urban Center. It would also prevent the increment growth of maritime activities in support of Barbers Point Harbor, as well as affect the expansion of industrial services and the creation of job opportunities to meet the needs associated with the urbanization of the Secondary Urban Center. The concept of a Mixed Use Alternative for the project area or for a portion of the project area has merit and will be explored further through subsequent development plan amendments.
IX. RELATIONSHIP BETWEEN LOCAL SHORT-TERM USES OF MAN'S ENVIRONMENT AND THE MAINTENANCE AND ENHANCEMENT OF LONG-TERM PRODUCTIVITY

The short-term uses are generally associated with the urbanization process. These are physical actions required to establish and develop the project. These actions include clearing, grubbing, installing infrastructure, constructing varied buildings and developing necessary support facilities. The long-term enhancement is related to the project's contribution to society and the general well-being of its residents.

SHORT-TERM

Construction-related activities will create noise, increase air pollution, disrupt traffic circulation and generate dust from dump trucks, earth-moving equipment, and various mechanical construction tools, etc. During grading operations, the existing vegetation cover will be lost and surface soils will be subject to erosion. Construction activities will result in short-term negative impact on the environment. However, completion of the project in accordance with local standards provide sufficient mitigation measures to reduce and virtually eliminate those temporary conditions. Nevertheless, increased traffic, concentrations of CO and ambient noise levels will increase upon completion of the project.

Jobs will be created during the construction period. In terms of 'cash flow', this results in a short-term positive impact on employment within the area.

Materials purchased and their utilization will also create a short-term beneficial impact on the economy of the area.

LONG-TERM

The urbanization of the land forecloses the land's future option for agriculture. This urbanization, however, supports the growth policies of General Plan of the City and County of Honolulu that calls for the development of a Secondary Urban Center. Kapolei Business Park will be a substantial employment center of the Secondary Urban Center. It will also enhance the long-term viability of Barbers Point Harbor, a State goal. In long-term productivity, Kapolei Business Park is an essential component to the success of the Secondary Urban Center concept.
X. IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES

The ultimate development of the project area will urbanize approximately 552 acres of the Ewa Plain, irreversibly committing the site to urban uses resulting in an irretrievable loss of agricultural lands.

Building material necessary to construct the project will be irretrievably committed. There would be only limited salvage value.

Human resources and energy expended to construct, maintain, and service the project would be irretrievable. Infrastructure and service consumption factors are essentially irreversible.

State and local governments would have a long-term public financial commitment to support facilities, services and programs such as fire, police, utilities, solid and liquid waste disposal, and social and health care services.

Environmental resources will be committed and/or changed. Air masses will change and become polluted with dust and vehicular exhaust emission. Water resources will be tapped, used and returned in polluted form to the environment. Ecological balance will be modified between such natural events as precipitation, ground run-off, evaporation and ground water storage as surface permeability is reduced due to construction. The developer must control erosion and establish new drainage patterns with man-made structures and landscaping. All structures placed on the site will result in a loss of views, vistas and existing open space.

Use of the land for urbanization will be an important commitment to the economic growth and viability of the Secondary Urban Center producing new employment prospects for Ewa Plain residents. Development of the land in accordance with the amendment will foreclose alternative land use options, although sufficient flexibility will be maintained to respond to changing public needs and market conditions.
XI. INTERESTS AND GOVERNMENTAL POLICY CONSIDERATIONS THOUGHT TO OFFSET THE ADVERSE ENVIRONMENTAL EFFECTS OF THE PROPOSED PROJECT

The proposed project was determined the best alternative for the site. The negative impacts generated by the proposed project are small when compared to the positive impacts of the project.

The proposed Kapolei Business-Industrial Park will have a significant influence on employment in the Ewa area. Jobs will be created in the construction industry during the development phases, and long-term employment will occur as businesses and new industries begin to locate there.

The proposed project also complements and supports the State's economic objectives for the development of Barbers Point Harbor. Portions of the site nearest the harbor are intended for maritime industries in a cooperative effort between the State and the applicant in improving and supporting the operation efficiency of the Harbor.

Many of the objectives sought by government and by the surrounding community will be met by the proposed development. Support for the project has already been received from the Ewa Beach Community Association and the State Department of Business and Economic Development. The State would net about $16.4 million from taxes on construction expenditures and, at full Development, would net over $7.6 million per year from taxes on operations. The project would also increase City and County tax revenues.

Both State and City policies call for directing growth to the secondary urban center. Both State and City have participated in this growth objective by using its resources to develop residential communities in the area. Development of the project site for business and industrial activities will provide a diversification of job opportunities for these people and others who will become residents of the area.
XII. MAJOR PERMITS AND APPROVALS

A number of permits and approvals must be secured by the Applicant before development of the site can begin:

<table>
<thead>
<tr>
<th>PERMIT/APPROVAL</th>
<th>APPROVING AUTHORITY</th>
<th>STATUS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land Use District Boundary Change</td>
<td>Land Use Commission</td>
<td>Petition to be filed following approval of DP Amendment</td>
</tr>
<tr>
<td>Development Plan Land Use Amendment</td>
<td>City Council</td>
<td>In process</td>
</tr>
<tr>
<td>Development Plan Public Facility Map Amendment</td>
<td>City Council</td>
<td>Application to be filed following approval of DP Amendment</td>
</tr>
<tr>
<td>Zone Change</td>
<td>City Council</td>
<td>Will be filed following approval of DP Amendment</td>
</tr>
<tr>
<td>EIS</td>
<td>Department of General Planning</td>
<td>In process</td>
</tr>
<tr>
<td>Water Master Plan</td>
<td>Board of Water Supply</td>
<td>In process</td>
</tr>
<tr>
<td>Subdivision</td>
<td>Department of Land Utilization</td>
<td>Application to be filed following zone change</td>
</tr>
<tr>
<td>Grading / Drainage Wastewater</td>
<td>Department of Public Works</td>
<td>To be submitted during subdivision process</td>
</tr>
<tr>
<td>Building Permit</td>
<td>Building Department</td>
<td>To be filed following subdivision process</td>
</tr>
<tr>
<td>Major Drainage Channel</td>
<td>Army Corp of Engineers</td>
<td>Supplemental EIS being prepared</td>
</tr>
</tbody>
</table>

- 112 -
Environmental Impact Statement

KAPOLEI BUSINESS-INDUSTRIAL PARK

XIII. LIST OF CONSULTANTS INVOLVED IN PREPARATION OF EIS

This report was prepared for The Estate of James Campbell by William E. Wanket, Inc. The following identifies the consultants involved in the preparation of their respective contributions. A resume follows each consultant's report.

<table>
<thead>
<tr>
<th>FIRM</th>
<th>TASK</th>
<th>INDIVIDUAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>William E. Wanket, Inc.</td>
<td>Primary Author/</td>
<td>William E. Wanket</td>
</tr>
<tr>
<td></td>
<td>Consultants Coordinator</td>
<td></td>
</tr>
<tr>
<td>John Zapotocky</td>
<td>Market Study</td>
<td>John Zapotocky</td>
</tr>
<tr>
<td>Char and Associates</td>
<td>Botanical Survey</td>
<td>Winona Char</td>
</tr>
<tr>
<td>Cultural Surveys Hawaii</td>
<td>Archaeological Survey</td>
<td>Dr. Hallett Hammatt</td>
</tr>
<tr>
<td>Michael S. Chu</td>
<td>View Assessment/ Graphics</td>
<td>Michael S. Chu</td>
</tr>
<tr>
<td>EarthPlan</td>
<td>Social Impact</td>
<td>Bema Cabacungan</td>
</tr>
<tr>
<td>Pacific Planning &amp; Engineering, Inc.</td>
<td>Traffic Impact</td>
<td>Conrad Higashionna</td>
</tr>
<tr>
<td>Decision Analysts Hawaii, Inc.</td>
<td>Agricultural Impact/ Fiscal</td>
<td>Bruce Plasch</td>
</tr>
<tr>
<td></td>
<td>Impact</td>
<td></td>
</tr>
<tr>
<td>Darby &amp; Associates</td>
<td>Noise Impacts</td>
<td>Ron Darby</td>
</tr>
<tr>
<td>Jim Morrow</td>
<td>Air Quality Impact</td>
<td>Jim Morrow</td>
</tr>
<tr>
<td>Engineering Concepts</td>
<td>Engineering</td>
<td>Craig Arakaki</td>
</tr>
<tr>
<td>Dr. Phillip L. Bruner</td>
<td>Survey of Avifauna and</td>
<td>Dr. Phillip L. Bruner</td>
</tr>
<tr>
<td></td>
<td>Feral Mammals</td>
<td></td>
</tr>
<tr>
<td>Lani Nedbalek</td>
<td>Consultant</td>
<td>Lani Nedbalek</td>
</tr>
<tr>
<td>Millcent Y.H. Kim</td>
<td>Research Consultant</td>
<td>Millcent Y.H. Kim</td>
</tr>
<tr>
<td>McCarter Computer Services</td>
<td>Typing</td>
<td>Ann McCarter</td>
</tr>
<tr>
<td>Best</td>
<td>Printing</td>
<td>Ralph He</td>
</tr>
</tbody>
</table>
XIV. CONSULTED PARTIES AND COMMENTS RECEIVED DURING THE PREPARATION OF THE DRAFT EIS

The notice of availability of the EIS Preparation Notice (EISPN) was officially published in the Office of Environmental Quality Control (OEQC) Bulletin on October 23, 1989. The deadline for requesting consulting party status and/or for submitting comments was established as November 22, 1989. Three agency comment letters were received after the deadline, however, Applicant has responded to all comment letters.

(+ Indicates responses received.)

FEDERAL AGENCIES

+ U.S. Department of the Army, U.S. Army Engineer District, Honolulu
+ U.S. Department of the Navy, Naval Base, Pearl Harbor
  U.S. Department of Agriculture, Soil Conservation Services
+ U.S. Department of Interior, Fish and Wildlife Services
  Department of Transportation, Federal Aviation Administration, Airports District Office

STATE AGENCIES

+ Department of Accounting & General Services, Division of Public Works
+ Department of Agriculture
+ Department of Budget and Finance, Housing Finance and Development Corporation
+ Department of Business and Economic Development
+ Department of Education
+ Department of Health
  Department of Human Services
+ Department of Land and Natural Resources, Historic Preservation Office
+ Department of Transportation
+ State Land Use Commission
+ Office of Environmental Quality Control
  Office of Hawaiian Affairs

- 114 -
Environmental Impact Statement
KAPOLEI BUSINESS-INDUSTRIAL PARK

Office of State Planning
Oahu Metropolitan Planning Organization

CITY AND COUNTY OF HONOLULU
+ Board of Water Supply
+ Department of General Planning
+ Department of Land Utilization
+ Department of Parks and Recreation
+ Department of Public Works
+ Department of Transportation Services
+ Honolulu Fire Department
+ Honolulu Police Department

PUBLIC UTILITIES/COMMUNITY ORGANIZATIONS/OTHERS

Hawaiian Telephone Company
Hawaiian Electric Company
American Lung Association
Hawaii Institute for Biosocial Research
University of Hawaii, Environmental Center
Ewa Neighborhood Board No. 23
+ Ewa Beach Community Association
Honokai Hale/Nanakai Gardens Community Association
Makakilo Community Association
Waianae Coast Neighborhood Board No. 24
Hawaii's Thousand Friends
Land Use Research Foundation
League of Women Voters

- 115 -
Environmental Impact Statement
KAPOLEI BUSINESS-INDUSTRIAL PARK

The Outdoor Circle
+ Dr. Alan Ziegler
  Oahu Sugar Company, Ltd.
  Councilman John DeSoto
  State Representative Paul Oshiro
  The Estate of James Campbell

Reproduced on the following pages (Green Section) is the EISP, followed by the comments received and the letters prepared in response.
XV. COMMENTS RECEIVED DURING THE PREPARATION OF THE FINAL EIS

Sixty (60) copies of the Draft Environmental Impact Statement (DEIS) were delivered to the Office of Environmental Quality Control (OEQC) on December 20, 1989. Notice of the DEIS was published in the December 23, 1989 issue of the OEQC Bulletin. OEQC distributed copies of the DEIS to interested public agencies, organizations and individuals (see OEQC Distribution List in the following Blue Section) per Section 11-200-21 of the Environmental Impact Statement Rules. In addition, two copies of the DEIS were delivered to the Honolulu Department of General Planning, the "accepting agency".

Following is a list of persons, organizations and public agencies that have commented on the DEIS (39 total). Seventeen (17) late comment letters were received after the 45-day public review deadline of February 6, 1990. Response letters were sent to all commenting parties, including late comment letters. In addition acknowledgement of comments received were mailed to several parties on February 16, 1990, prior to final response letters. Also, a joint meeting with the Applicant's representatives and representatives from the OEQC, Office of State Planning and the State Department of Agriculture was held to discuss the project's impact on Agriculture (March 15, 1990).

LIST OF PERSONS, ORGANIZATIONS AND PUBLIC AGENCIES COMMENTING ON THE DEIS

Federal (4)

1. Department of the Army
2. Department of the Navy
3. US Fish and Wildlife Service
4. US Soil Conservation Service

STATE OF HAWAII (14)

1. Department of Agriculture
2. Department of Business and Economic Development, Energy Division
3. Department of Budget and Finance, Housing Finance and Development Corporation
4. Department of Defense
5. Department of Education, Leeward District, Office of District Superintendent
Environmental Impact Statement
KAPOLEI BUSINESS-INDUSTRIAL PARK

6. Department of Health
7. Department of Land and Natural Resources
8. Department of Land and Natural Resources, Preservation Program
9. Department of Land and Natural Resources, Natural Area Reserves System Commission
10. Department of Transportation
11. Office of Environmental Quality Control
12. Office of State Planning
13. State Public Works Engineer
14. University of Hawaii, Department of Zoology

CITY AND COUNTY OF HONOLULU (9)
1. Department of General Planning
2. Department of Housing and Community Development
3. Department of Land Utilization
4. Department of Parks and Recreation
5. Department of Public Works
6. Department of Transportation Services
7. Board of Water Supply
8. Building Department
9. Police Department

OTHERS (12)
1. Bishop Museum, Department of Zoology
2. Hawaii Audubon Society
3. Hawaiian Electric Company
4. Hawaii Nature Center

- 118 -
Environmental Impact Statement
KAPOLEI BUSINESS-INDUSTRIAL PARK

DP/EA
proposal for:
Development Plan Amendment/Environmental Assessment

KAPOLEI BUSINESS PARK

prepared for: The Estate of James Campbell
prepared by: William E. Wanket, Land Use Consultant
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>SUMMARY</td>
<td>1</td>
</tr>
<tr>
<td>BACKGROUND</td>
<td>1</td>
</tr>
<tr>
<td>A. ESSENTIAL INFORMATION</td>
<td>1</td>
</tr>
<tr>
<td>B. DESCRIPTION OF PROPERTY</td>
<td>2</td>
</tr>
<tr>
<td>1. Property Boundary</td>
<td>2</td>
</tr>
<tr>
<td>2. Topography</td>
<td>3</td>
</tr>
<tr>
<td>3. Existing Uses</td>
<td>3</td>
</tr>
<tr>
<td>4. Slope</td>
<td>4</td>
</tr>
<tr>
<td>5. Soils</td>
<td>4</td>
</tr>
<tr>
<td>7. Topo Map</td>
<td>4</td>
</tr>
<tr>
<td>8. Project Layout</td>
<td>4</td>
</tr>
<tr>
<td>DEVELOPMENT PROPOSAL</td>
<td>5</td>
</tr>
<tr>
<td>A. PROPOSED USE OF THE PROPERTY</td>
<td>5</td>
</tr>
<tr>
<td>B. DEVELOPMENT TIMETABLE</td>
<td>5</td>
</tr>
<tr>
<td>C. APPROXIMATE COST</td>
<td>5</td>
</tr>
<tr>
<td>NEED FOR PROPOSED DEVELOPMENT</td>
<td>5</td>
</tr>
<tr>
<td>A. PUBLIC PROBLEMS OR NEEDS</td>
<td>5</td>
</tr>
<tr>
<td>B. INTENDED MARKET</td>
<td>6</td>
</tr>
<tr>
<td>C. DESIGNATED USE VERSUS PROPOSED USE</td>
<td>7</td>
</tr>
<tr>
<td>FEDERAL, STATE AND CITY PLANS/PROGRAMS</td>
<td>7</td>
</tr>
<tr>
<td>A. FEDERAL</td>
<td>7</td>
</tr>
<tr>
<td>B. STATE OF HAWAII</td>
<td>8</td>
</tr>
<tr>
<td>1. Hawaii State Plan</td>
<td>8</td>
</tr>
<tr>
<td>2. State Functional Plans</td>
<td>9</td>
</tr>
</tbody>
</table>
C. CITY ................................................................. 9
   1. General Plan .................................................. 9
   2. Development Plan ........................................... 12
   3. Other ......................................................... 13

IMPACTS ............................................................. 13
A. DEMOGRAPHICS IMPACTS ................................. 13
   1. Residential Population ................................. 13
   2. Visitor Population ....................................... 13
   3. Character or Culture of the Neighborhood ........ 13
   4. Displacement ................................................. 14
   5. Other Social Impacts .................................... 14
B. ECONOMIC IMPACTS ........................................... 14
   1. Economic Growth ........................................... 14
   2. Employment ................................................ 16
   3. Government Revenues - Taxes ....................... 16
   4. Location Vis A Vis Intended Market ............ 17
C. HOUSING IMPACTS ............................................. 17
   1. Increase Supply ........................................... 17
D. PUBLIC SERVICES ............................................. 17
   1. Access and Transportation .......................... 17
   2. Water ....................................................... 19
   3. Wastewater ............................................... 20
   4. Drainage .................................................. 20
   5. Solid Waste ............................................... 21
   6. Schools ................................................... 21
   7. Parks ...................................................... 21
<table>
<thead>
<tr>
<th>Chapter</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>Police</td>
<td>21</td>
</tr>
<tr>
<td>9</td>
<td>Fire</td>
<td>22</td>
</tr>
<tr>
<td>10</td>
<td>Power and Telephone</td>
<td>22</td>
</tr>
<tr>
<td>11</td>
<td>Education and Day Care</td>
<td>22</td>
</tr>
<tr>
<td>12</td>
<td>Medical and Emergency Services</td>
<td>23</td>
</tr>
<tr>
<td>13</td>
<td>List of Agencies Consulted</td>
<td>23</td>
</tr>
<tr>
<td>E</td>
<td>ENVIRONMENTAL IMPACTS</td>
<td>23</td>
</tr>
<tr>
<td>1</td>
<td>Noise</td>
<td>23</td>
</tr>
<tr>
<td>2</td>
<td>Air Quality</td>
<td>24</td>
</tr>
<tr>
<td>3</td>
<td>Compatibility with Surrounding Environment</td>
<td>26</td>
</tr>
<tr>
<td>4</td>
<td>Historic and Archaeological Resources</td>
<td>27</td>
</tr>
<tr>
<td>5</td>
<td>Natural Features</td>
<td>29</td>
</tr>
<tr>
<td>6</td>
<td>Hazards</td>
<td>32</td>
</tr>
<tr>
<td>F</td>
<td>ALTERNATIVES CONSIDERED</td>
<td>33</td>
</tr>
<tr>
<td>G</td>
<td>PROPOSED MITIGATION MEASURES</td>
<td>33</td>
</tr>
<tr>
<td>H</td>
<td>SUMMARY</td>
<td>33</td>
</tr>
<tr>
<td>I</td>
<td>DETERMINATION</td>
<td>34</td>
</tr>
<tr>
<td></td>
<td>NOTIFICATION REQUIREMENTS</td>
<td>34</td>
</tr>
<tr>
<td></td>
<td>PROPOSED NOTIFICATION LIST FOR THE EIS PREPARATION</td>
<td>36</td>
</tr>
<tr>
<td></td>
<td>NOTICE (EISP)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>LIST OF CONSULTANTS INVOLVED IN PREPARATION OF DP EA</td>
<td>38</td>
</tr>
</tbody>
</table>
LIST OF FIGURES

1. LOCATION/BOUNDARY MAP
2. PROPOSED DEVELOPMENT PLAN LAND USE MAP
3. EXISTING DEVELOPMENT PLAN LAND USE MAP
4. EXISTING DEVELOPMENT PLAN PUBLIC FACILITIES MAP
5. EXISTING ZONING MAP
6. PROPOSED ZONING MAP
7. EXISTING LAND USES
8. TOPOGRAPHIC MAP
9. SOILS MAP
10. FLOOD ZONE MAP
SUMMARY SHEETS

DGP Ref No:

NB Area: Ewa Beach #23

Acreage: 552.1

THK: 9-1-14:2 (por)
9-1-15:1, 13, 16

EWA

Development Plan Land Use

Amendment Being Considered

AMENDMENT/PROJECT INFORMATION

Amendment Request: Designate 552.1 acres from Agriculture to Industrial and Commercial.

Location: In Ewa including Hawaii Raceway Park on the southeast and adjoining Barbers Point Harbor to the northwest.

Owner: The Estate of James Campbell

Requested by: Owner

Agent: William E. Wanket, Inc.
Pacific Tower, Suite 1010
1001 Bishop Street
Honolulu, Hawaii 96813

Basis for Request: To provide industrial and commercial lands contiguous and in proximity to the James Campbell Industrial Park.

Type of Project: Maritime and intensive industrial and commercial.

Impact on Provision on Housing: None
EXISTING CONDITIONS

Land Use: Coral stockpile, tree nursery, Hawaii Raceway Park, and OSCO cane fields on land leased from the Estate of James Campbell.

Structure: None

ALISH: Prime and Other Important

Soil Features: Coral outcrop

Possible Constraints: Archaeological/paleontological sites are thought to be still extant within the project area. An archaeological study of the project area will be conducted to determine present land conditions and location and identification of archaeological/paleontological sites. Appropriate mitigative measures will be identified.

A landfill area containing industrial waste has been identified. Principals are aware of the conditions and actions are currently being undertaken to resolve the situation. Details of actions taken to mitigate the situation will be prepared during the EIS process.

PRESENT PLAN/ZONING DESIGNATIONS

State Land Use: Agriculture
DP Land Use Map: Agriculture
DP Public Facilities Map: See Figure 4.
DP Special Provisions: None
Zoning: AG-2 General Agriculture District. (See Figure 5).
APPLICATION

Development Plan Amendment

Environmental Assessment

The application for an Ewa Development Plan Land Use Map amendment involves the redesignation of approximately 552.1 acres. Figure 1. The land area under review is within the general vicinity of the Barbers Point Harbor and lies close to Kapolei City, Ewa. The proposed site will be used for various commercial and industrial projects. The redesignation from Agriculture to Industrial on the Ewa Development Plan Land Use Map will include 109.3 acres approximately 56 acres of which is destined to be used by the State for future expansion of the Barbers Point Harbor. A 19.2 acre site located northeast of the Barbers Point Harbor is intended for Commercial use. Approximately 423.6 acres contiguous to Industrial designated land is proposed for intensive industrial. (See Figure 2).

In general, the project area is bounded by the railroad right-of-way to the north, Halakole Road to the south, the Barbers Point Harbor and Ko Olina to the west, and Barbers Point Naval Air Station to the east.

The information prepared in this application will correspond to the Department of General Planning's application format.

I. BACKGROUND

A. ESSENTIAL INFORMATION

1. Applicant: The Estate of James Campbell
   828 Fort Street Mail Suite
   500
   Honolulu, Hawaii 96813
   (808) 536-1961

   Agent: William E. Wanket, Inc.
   Pacific Tower, Suite 1010
   1001 Bishop Street
   Honolulu, Hawaii 96813
   (808) 533-4937

2. Land Owner: Same as applicant

4. Area: 552.1 acres

5. Location: In Ewa including Hawaii Raceway Park on the southeast and adjoining Barbers Point Harbor to the northwest. (See Figure 1).

6. Tax Map Key: 9-1-14:2 (Por)
                9-1-15:1, 13, 16

7. Existing Uses: Land uses include coral mining, agriculture uses, and a raceway park. The existing James Campbell Industrial Park is located makai of the project area. Phase I of the Ko Olina resort is currently under construction as are the shore facilities for the harbor.

8. State Land Use: Agriculture.

9. DP Designation:
   a. Land Use Map: Agriculture. See Figure 3.
   b. Public Facilities Map: See Figure 4.

10. Zoning: AG-2 General Agriculture District. See Figure 5.

B. DESCRIPTION OF PROPERTY
1. Property Boundary
   The site is a portion of Lots 1415-A, 3155 (Por), 3158 (Por) and 172-A-1 of Land Court Application 1069 at Honouliuli, Ewa, Oahu, Hawaii.

-2-
2. **Topography**

The subject property, an area of low topographic relief with mounds and depressions scattered over the site, lies in the Ewa Plain. Except for a limestone quarry and a coral stockpile, which occupies about 105 acres in the southwest corner of the property, the site is generally flat with an average slope from the railroad right-of-way to Malakole Road of approximately one percent. Elevations range from approximately five feet mean sea level (MSL) near the intersection of Kalaeloa Boulevard and Malakole Road to approximately 75 feet MSL near the northwest corner of the petition area. Slopes of less than 0.5 percent to 5 percent are found on the site.

3. **Existing Uses**

Land uses (See Figure 7) include coral mining, agricultural uses, and a raceway park. The existing James Campbell Industrial Park is located immediately makai of the project area. Phase I of the Ko Olina resort is currently under construction, as are the shore facilities for the harbor. Also near the project site is the desalination plant, which is under construction in the parcel already designated Industrial on the DP map. The plant, located in the northwest corner of the Industrial Park, is a project by the State Department of Land and Natural Resources to develop a nonpotable source of water for irrigation from brackish water.

Oahu Sugar Company (OSCo) currently leases a portion of the project area for sugar cane cultivation. According to OSCo maps, Field 004 encompasses an area of approximately 260 acres. The OSCo lease expires in the year 1995. The Estate also uses approximately 10 acres of the land as a small tree nursery. This site is located near the intersection of Kalaeloa Boulevard and Malakole Road.
Coral mining operations are currently performed by Hawaiian Cement for the manufacture of cement and concrete products. The Hawaiian Cement option area extends over approximately 267 acres in the northwest corner of the expansion area. The Hawaiian Cement agreement continues beyond the year 2000.

Hawaii Raceway Park, located in the southeast corner of the project area, recently reopened after months of inactivity due to insurance problems. The raceway park occupies 66 acres of the project area as well as a portion of the adjacent parcel owned by the United States government. The City Council of the City and County of Honolulu approved a resolution in June 1989 requesting the Chief Planning Officer to initiate a proposal to designate the Hawaii Raceway Park site as a park on the Oahu development plan maps. Coincident with the existing lease, the city has set up a temporary program through 1991 to allow racing at the park. In the meantime, state and city officials are working to find another site for a permanent motor sports facility.

4. Slope

The project site has an average slope of one percent.

5. Soils

According to the Soil Survey by the U.S. Department of Agriculture Soil Conservation Service, much of the soil on the property is Coral Outcrop (Cr) or consists of shallow, stony soils, such as Ewa silty-clay loam (EmA), Honolulu clay (HxA), and Hamala stony silty clay loam (Hnc). Figure 9.

6. Location Map: See Figure 1.

7. Topo Map: See Figure 8.

8. Project Layout

No layout has been prepared for the project site. The layout will depend upon the needs of the individual users.
II. DEVELOPMENT PROPOSAL

A. APPLICANT'S PROPOSED USE OF THE PROPERTY

The applicant intends to make the site available for a variety of uses allowed in the I-2, I-3 and B-2 zoning districts. The site includes Hawaiki Raceway Park on the SE and lies close to the Barbers Point Harbor to the northwest.

The project site is ideally located to provide industrial land.

B. DEVELOPMENT TIMETABLE

The project requires the following major land use approvals:

1. Development Plan Amendment
2. Land Use Boundary Change to Urban
3. Zone Change

These approvals are expected to take about 3 years.

C. APPROXIMATE COST

On-site and off-site construction cost have been determined at $100,000,000 and $10,000,000 respectively.

III. NEED FOR PROPOSED DEVELOPMENT

A. PUBLIC PROBLEMS OR NEEDS

There is an existing shortage of industrial land in the City and County of Honolulu. This shortfall is the result of a number of factors:

During the late 1970's and early 1980's, there was a relative abundance of industrial land available for development near to the bulk of the population as well as at Campbell Industrial Park.

In the early 1980's, the City and County of Honolulu's Development Plan Land Use Analysis indicated there would be no need for additional industrial land through the year 2000.
A national economic slowdown occurred during the early 1980's and extremely high interest rates curtailed demand for industrial and commercial development within the City and County of Honolulu. All of the above set the stage for little new industrial development during the mid 1980's. The economic environment improved during the late 1980's both nationally and in Hawaii. Existing inventory of industrial space was quickly absorbed and prices escalated.

The impact on industrially designated lands was especially acute because of the increase in demand for commercial land at the same time. Commercial and industrial lands allow for a number of overlapping uses. Commercial land generally allows for higher uses for a limited space. This shortage of industrial land and resultant high prices is detrimental to both existing Hawaii based businesses facing rent renegotiations or expansion and to new Hawaii based businesses trying to become established. A plan for industrially designated land which recognizes the long term needs of business and the changing industrial and commercial environment should be considered at this time.

The already developed phases of the Campbell Industrial Park are almost fully committed and the Estate of James Campbell is ready to expand the park further. While there is additional land designated and approved for expansion, the recent islandwide shortage of industrial space led the Estate to conclude that the remaining area planned for expansion of JCIP should be examined in light of both the present and long range market conditions. As a result, the Estate is requesting the proposed amendment to the development plan.

B. INTENDED MARKET

Industrial land users are the intended market. The specific intended market is regional and community users of industrial lands with businesses requiring either a high land component or which generally operate on thin margins. Target markets would include existing businesses which are facing rent escalations or needing space for expansion. Longer range users are expected to be consistent with the average industrial land user in the City and County of Honolulu. Land will be available to service the industrial needs of the Ewa and Central Oahu areas as they urbanize around the existing Campbell Industrial Park. A detailed market study will be conducted during the EIS process.
C. DESIGNATED USE VERSUS PROPOSED USE

The project site is designated agriculture. A portion of the site is in sugar production. These canelands are on the periphery of the OSCO plantation, and are near the area designated industrial. Campbell Estate currently operates a small tree nursery on the property. The trees are used to supply the needs of the Estate's various developments. In addition the remaining area includes the Hawaii Raceway Park, a limestone quarry, and dredged coral stockpile. The stockpile excavated from the Barbers Point Harbor is currently being crushed and processed. Areas not used for agricultural purposes generally contain coral and sand soils not suitable for raising crops. The loss of this site for agriculture purposes should not adversely impact the economic viability of agricultural production. A more thorough analysis will be provided during the EIS examination.

The site, adjacent to the new harbor and located within the Campbell Industrial Park, is more appropriately adaptable for industrial and commercial uses.

IV. FEDERAL, STATE AND CITY PLANS/PROGRAMS

A. FEDERAL

The new Barbers Point Harbor has been supported by the Federal Government since its inception when the harbor was authorized by Congress in 1965. In 1982, the Corps of Engineers awarded a contract for approximately 50 million dollars to construct the first increment of the Joint Federal-State harbor. Phase II is currently under construction and the planning process for Phase III has begun.

The provision to expand the existing maritime industrial site as proposed by the applicant supports the intent of the Federal Government to develop an operational harbor to accommodate Oahu's long-term waterborne commerce needs.

Also, expanding the area for commercial and industrial services near the harbor will further increase the economical viability of the facility.
B. STATE

1. Hawaii State Plan

Within the State Plan there are several policies and objectives which are applicable to the proposed amendment: Following is a brief discussion on some of the objectives and policies. A full discussion on the objectives and policies of the Hawaii State Plan relating to the proposed project will be incorporated into the EIS that will be prepared.

Objectives and policies for the economy -- in general (Section 6).

(a) (1) Increased and diversified employment, increased income and job choice, and improved living standards for Hawaii's people.

(b) (9) Foster greater cooperation and coordination between the public and private sectors in developing Hawaii's employment and economic growth opportunities.

Comment: The provision of industrial and commercial sites in this location will assist in providing job opportunities for residents in Ewa, Central Oahu, and the Leeward Coast. The employment base for the area population is very limited. A broader choice of jobs will result from the proposed project.

The provision of the industrial site for maritime uses adjacent to the new harbor represents a cooperative and coordinated effort between the State and the applicant in improving and supporting the operational efficiency of the harbor.

Objectives and policies for facility systems -- transportation (Section 17).

(b) (4) Provide for improved accessibility to shipping, docking, and storage facilities.

(b) (8) Increase the capacities of airport and harbor system and support facilities to effectively accommodate transshipment and storage needs.
Comment: The intent of the proposed industrial project is among other things, to provide space for storage requirements as needed by the harbor uses. The proposed amendment to the Development Plan Land Use map is in full support of the above objectives.

2. State Functional Plans

The EIS that will be prepared will contain a description of the appropriate State Functional Plans impacted by the proposed project.

C. CITY

1. General Plan

The proposed Ewa Development Plan Land Use Map Amendment relates to the Objectives and Policies of the City and County's General Plan as follows:

Population

Objective C: To establish a pattern of population distribution that will allow the people of Oahu to live and work in harmony.

Policy 2: Encourage development within the secondary urban center at Kapolei and the Ewa and Central Oahu urban fringe areas to relieve development pressures in the remaining urban-fringe and rural areas and to meet housing needs not readily provided in the primary urban center.

Comment: The requested changes from Agriculture to Industrial and Commercial will further urbanize the area strengthening the concept of the Secondary Urban Center.

Economic Activity

Objective A: To promote employment opportunities that will enable all the people of Oahu to attain a decent standard of living.
Policy 1. Encourage the growth and diversification of Oahu's economic base.

Policy 3. Encourage the development in appropriate locations on Oahu of trade, communications, and other industries of a non-polluting nature.

Objective D: To make full use of the economic resources of the sea.

Policy 2. Encourage the development of aquaculture, ocean research, and other ocean-related industries.

Objective G: To bring about orderly economic growth on Oahu.

Policy 1. Direct major economic activity and government services to the primary and secondary urban centers.

Policy 3. Maintain sufficient land in appropriately located commercial and industrial areas to help ensure a favorable business climate on Oahu.

Comment: The project sites and intended uses support the above objectives and policies in several ways.

The proposed project area adjoins and will serve to expand and support the facilities at the Harbor, James Campbell Industrial Park and the proposed City of Kapolei. The industrial and commercial sites will provide employment opportunities for the residential population within the region...

Transportation and Utilities

Objective A: To create a transportation system which will enable people and goods to move safely, efficiently and at a reasonable cost; serve all people, including the poor, the elderly, and the physically handicapped, and offer a variety of attractive and convenient modes of travel.
Policy 13: Facilitate the development of a second deep water harbor to relieve congestion in Honolulu Harbor.

Comment: The proposed project will provide the Barbers Point Harbor area with additional nearby commercial and industrial acreage; thereby facilitating development of the Harbor area.

Physical Development and Urban Design

Objective A: To coordinate changes in the physical environment of Oahu to ensure that all new developments are timely well designed, and appropriate for the areas in which they will be located.

Policy 5: Provide for more compact development and intensive use of urban lands where compatible with the physical and social character of existing communities.

Policy 7: Locate new industries and new commercial areas so that they will be well related to their markets and suppliers, and to residential areas and transportation facilities.

Objective C: To develop a secondary urban center in Ewa with its nucleus in the Kapolei area.

Policy 2: Encourage the development of a major residential, commercial, and employment center within the secondary urban center.

Policy 3: Encourage the continuing development of Barbers Point as a major industrial center.

Policy 5: Cooperate with the State and Federal governments in the development of a deep water harbor at Barbers Point.
Comment: The Objectives and Policies listed above are all applicable to the proposed commercial and industrial sites. The project will provide employment opportunities within the secondary urban center. It is compatible and appropriate for the area in which it is located, furthering the expansion of the area as a major industrial center. The site is close to markets and suppliers, and to residential areas and transportation facilities. Finally, the proposal will further the development of the harbor.

2. Development Plan for Ewa


Identification of Public Buildings, Public or Private Facilities for Utilities, Terminals and Drainage.

Terminals.

Harbors.

The water transportation system consists of publicly-owned commercial and recreational harbors, and launching ramp facilities.

Land uses directly supportive of marine activities may be allowed on harbor fast lands. . . For commercial harbors this may also include cargo handling and storage facilities, seafood processing plants, shipyards, . . . maritime related industrial activities, and other such uses.

Comment: The proposed project site will be used for maritime-related industrial activities.


Area description recognizes the intent to provide additional industrial sites in the project area with the following statement: "On the makai part of Barbers Point coral plain, the present industrial area may expand mauka."
c. Land Use Map

The project site is designated agriculture on the Ewa Development Plan. Figure 3.

d. Public Facilities Map

See Figure 4.

3. Others

a. State Land Use District Designation

The site is designated agricultural. See discussion in Section E, Environmental Impact, subsection g., Agricultural Lands.

V. IMPACTS

A. DEMOGRAPHIC IMPACTS

1. Residential Population

The site does not contain a residential component. The areas of proposed development are adjacent to the new harbor and the James Campbell Industrial Park. The project will, however, provide substantial employment opportunities for residents in the area.

2. Visitor Population

N/A

3. Character or Culture of the Neighborhood

The project site is located in the Ewa Development Plan Area which includes Census Tracts 83 through 86.02. During the first five years of this decade, the Ewa Development Plan Area grew by 2.7 percent, for a 1985 population of 37,320. This growth was small, when compared to the islandwide population growth of 6.7 percent.

The City General Plan targets growth for the Ewa Development Plan (DP) area. Based on State Series H-K projects of Oahu for the year 2010, Ewa's share of the population could be between 119,940 and 132,933 people. The project, although not providing a residential component.
should provide a substantial employment generator for the increased population expected in Ewa. The project offers job opportunities in the "second city" and supports current population distribution policies.

Historically, three major forces have shaped the existing Ewa community: national defense, sugar cultivation, and a growing suburban community. Government efforts to direct growth to the region have added a fourth major force in the shaping of the area.

The new communities of Kapolei Villages and West Loch will soon change the social complexion of Ewa, as will the resort development in Ko Olina.

The social impact assessment (EIS) will identify potential changes to neighborhood character due to the proposed project.

Further, the social impact assessment will explore potential social issues on this project.

4. Displacement

Campbell Estate currently operates a small tree nursery on the property. Canelands, periphery fields of OSco plantation, occupy a portion of the site. The plantation's lease with the Estate is due to expire in 1995. The remaining areas include the Hawaii Raceway Park, whose lease is due to expire in 1991, a limestone quarry, and stockpile of dredged coral being processed by Hawaiian Cement under an agreement that continues beyond the year 2000.

5. Other Social Impacts

N/A

B. ECONOMIC IMPACTS

1. Economic Growth

Approval of the proposed development will foster economic growth in the State of Hawaii and in the City and County of Honolulu in the following manner:
a. Short Term - Development of the proposed project will provide employment within the construction industry and revenues for construction companies.

b. Long Term - The proposed development will provide opportunities for harbor oriented businesses as well as other industrial and commercial establishments. Approval of the development will insure that the federally and state supported harbor will be able to attract its share of the transportation related enterprises necessary to supplement Honolulu Harbor as the state's ocean transportation center.

c. Other Impacts include the following:

i. Availability of I-3 and I-2 land in proximity to the Barbers Point Harbor will contribute to a reduction of overland transportation costs. A significant amount of cargo currently arriving at Honolulu Harbor is bound for the Leeward area of Oahu. Savings of overland hauling costs will make Hawaii and Oahu businesses more competitive with mainland and foreign competitors.

ii. Availability of I-2, I-3, and commercial lands at the proposed location at lower cost than currently extant in the area of Honolulu Harbor would further contribute to an improved competitive position for not only Oahu but Hawaii based businesses as a whole.

iii. Development of the proposed project will stimulate economic activity through a multiplier effect. As new businesses locate at the proposed area it is expected that the effect on the economy will be positive.

Economic assumptions would be highly speculative at this juncture as specific businesses locating to the proposed development have not been specified.
2. Employment
   a. Short Term - Short term employment will be limited to the construction employment generated by the development of the subdivision. Site development costs have been estimated at $100 million dollars on site and $10 million dollars off site.

   Construction also will be generated as lessees of the property construct improvements necessary to develop their individual enterprises.

   According to a DBED economist, during 1989 each $115,000 in construction put in place generated one construction job. Thus an estimate of the number of construction jobs can be made by dividing the estimated project cost of $110,000,000 by $115,000. The total construction jobs is thus estimated at 956.

   Long Term - Long term employment for the site has been estimated at 5923 workers or approximately 10.7 workers per acre (at completion in year 2030).

3. Government Revenues - Taxes

   The project should contribute to an overall growth in county and state revenues. A detailed analysis will be conducted during the EIS process. The major issue to be addressed under the fiscal impact analysis will be to determine whether or not the proposed commercial and industrial activities would result in a net increase in revenues to the State and the County. Estimates of taxes and revenues will include rollback, property, excise, income, and other taxes and revenues sources, while expenditures will include debt service for supporting capital improvements, and expenditures for police, fire, education, and other services.
4. Location Vis A Vis Intended Market

The already developed phases of the James Campbell Industrial Park are almost fully committed. The Estate of James Campbell is ready to expand the JCIP further. While there is additional land designated and approved for expansion, the recent shortage islandwide of industrial space led the Estate to conclude that the remaining area planned for expansion of the JCIP should be considered in light of both the present and long range market conditions.

C. HOUSING IMPACTS

1. Increase Supply

   N/A

D. PUBLIC SERVICES

1. Access and Transportation

Malakole Road, the main access to Barbers Point Harbor, runs in an east-west direction between the James Campbell Industrial Park and the proposed project site. The two-lane road intersects Kalaeloa Boulevard, a four-lane divided roadway with a right-of-way width of 108 feet, at the mauka boundary of the existing industrial park.

Kalaeloa Boulevard runs through the project site in a north-south direction. It connects Palailai interchange in the north to Malakole in the south. North of its intersection with Malakole, it forms a four-lane roadway with a raised grassed median and four-foot paved shoulders. Left and right turn pockets are provided for southbound traffic at the intersection. South of the intersection, the pavement narrows to two lanes with a median between the lanes for approximately 200 feet. Lanes are generally 12 feet in width. The posted speed limit is 35 mph north of the Malakole Road intersection and 25 mph to the south as the roadway narrows.
Existing Traffic Conditions

The State Department of Transporation (DOT) 24-hour traffic counts in 1987 at the intersection of Kalaekoa Boulevard and Malakole Road indicate the following:

- Peak hours along Kalaekoa occur between 6:00 a.m. and 8:00 a.m. in the morning and 3:00 p.m. - 5:00 p.m.

- Morning peak hours counted 1,471 vehicles in both directions on Kalaekoa Boulevard from 6:30 a.m. - 7:30 a.m. Between 3:15 p.m. - 4:15 p.m. 1,118 vehicles were counted. Trucks and buses accounted for approximately 9% or 132 vehicles during the morning peak hour traffic and 6% or 72 vehicles during the afternoon peak hour traffic on Kalaekoa Boulevard.

- Of the 3,153 vehicles at the Palailai Interchange during the same morning hours, 52% (1,642 vehicles) were eastbound, while 48% (1,511) vehicles were westbound. In the afternoon, 3,345 vehicles approached the interchange with 60% (2,023 vehicles) eastbound and 40% (1,322) westbound during the 3:30 - 4:30 peak hour.

Traffic from the project site is expected to impact Kalaekoa Boulevard, Farrington Highway (the state maintained highway that connects Waipahu in the east to Waianae in the west) and the H-1 freeway at the Palailai Interchange by increasing traffic volumes on these facilities. Local impacts of the proposed project will be primarily along Kalaekoa Boulevard which will be used to enter and exit the project site at approximately four access points. Regional impacts on the H-1 Freeway, Farrington Highway, and Palailai Interchange will be considered in the Ewa Transportation Master Plan.

The Ewa Transportation Master Plan is being developed to identify roadway system improvements necessary to accommodate forecasted future traffic in the area. Roadway improvement costs will be identified during the EIS process.
2. Water

Potable Water:

The existing JCIP is currently served by 24-inch and 20-inch mains in Kalaeloa Boulevard. These mains were installed by the Estate and dedicated to the Board of Water Supply. The two mains extend down Kalaeloa Boulevard to Malakole Road. Within Malakole Road, a 20-Inch main runs toward the harbor, with a 15-inch main heading towards Barbers Point Naval Air Station.

Nonpotable Water:

Campbell Estate participated with Ko Olina in the construction of a nonpotable water system consisting of wells and storage tanks located above the H-2 freeway north of the project area. The State Department of Land and Natural Resources is currently constructing a desalinization plant adjacent to the project site. The plant is initially planned to process approximately 1 million gallons of brackish water per day.

The nonpotable water is intended to be used for irrigation, cooling, and other nonconsumptive uses. Currently, potable water is used for irrigation in the existing park.

A dual water system is proposed for the Kapolei Business Park. The existing water mains in Kalaeloa Boulevard are intended to supply the potable water for the expansion areas. Distribution lines will be located in the interior roadways to service the lots.

A nonpotable water system for irrigation, cooling, and other nonconsumptive uses is being planned for the Kapolei Business Park. Currently, alternative sources of nonpotable water are being investigated. These include wells into the caprock aquifer at various locations and the use of water from the State's desalinization plant.
3. Wastewater

The project site and the adjacent JCIP are not served by a City and County sewer system. Individual wastewater treatment systems such as cesspools and septic tanks are currently used by tenants of the industrial park to dispose of their sewage. The existing JCIP is below the Underground Injection Control line (in the vicinity of Makakole Road), which permits the use of the individual systems.

The expansion area will be served by a sewer system and pump station(s) connecting to existing or proposed systems mauka of the industrial area, eventually discharging at the Honouliuli Wastewater Treatment Plant (WWTP).

The Honouliuli WWTP is currently near its 25 MGD capacity with the available capacity already committed. Plans are being prepared for the expansion of the plant to 38 MGD. The expansion of the plant is tentatively scheduled to be completed by 1994.

The Development Plan, Public Facilities Map for the proposed Kapolei City was recently amended to include a temporary sewage treatment plant in the industrial area in the event the Honouliuli WWTP expansion is not completed prior to development of the "second city." A temporary treatment plant could be designed to accommodate Kapolei Business Park well as Kapolei City in the interim.

4. Drainage

There are no existing drainage improvements in the project area. Small culverts and existing roadways with underground drainage currently collect and convey runoff to drainage ditches and channel, ultimately discharging into the ocean. A major drainage channel serving the areas east of Kalaaeloa Boulevard is located along the Barbers Point Naval Air Station boundary.
Project area is located in Flood Zone District D, indicating areas in which flood hazards are undetermined. (See Figure 10).

A major drainage channel extending from the shoreline to the railroad right-of-way is serving the expansion area west of Kualoa Boulevard. A system of underground and open channels are intended to collect and convey runoff from the area to the existing channel. More information will be provided in the EIS process.

5. Solid Waste

Private companies are currently used by tenants of the existing industrial park to collect and dispose of solid waste. It is anticipated that private companies will also handle the solid wastes of the expansion area.

6. Schools

N/A

7. Parks

The proposed project is not anticipated to impact on recreational sites and facilities.

8. Police

The project site is within Beat No. 325 of District III. This beat is primarily served by the Pearl City Main Station, although backup service may be provided by personnel at the Wai'anae Police Sub-station. A new Police Station is being planned for the City of Kapolei.

Police officials will be contacted in the EIS process to understand project impacts on existing police facilities and personnel levels. Identify planned changes independent of the proposed project and identify project impacts.
9. Fire

The nearest fire station is located in Hakakilo, which has a single engine company. Backup for the general vicinity is provided by fire stations in Ewa Beach, Waipahu, and Nanakuli. The Ewa Development Plan Public Facilities Map indicates a fire station on another parcel approximately one-half mile south of the Barbers Point Harbor. This fire station is proposed to be constructed within a few years.

Fire department officials will be contacted in the EIS process to understand project impacts on existing fire stations and personnel levels, identify planned changes independent of the proposed project, and identify project impacts.

10. Power and Telephone

The existing industrial park is currently serviced by Hawaiian Electric and Hawaiian Telephone.

Power and telephone service is anticipated to be serviced by Hawaiian Electric and Hawaiian Telephone Company respectively. The agencies will be contacted for their requirements.

11. Education and Day Care

The proposed project is not expected to impact educational facilities, since it will not directly increase the residential population. The State Department of Education will be contacted for further information.

Because the proposed project will increase jobs in the area, child care facilities may be required to serve the area.
12. Medical and Emergency Services

The impact of the proposed project on emergency medical services will depend on the potential toxicity of on-site substances and other factors. The Emergency Service Systems Branch of the State Department of Health will be contacted to identify potential project impacts.

13. List of Agencies Consulted

Department of Health
Division of Wastewater Management
Department of Transportation
Transportation Services
Board of Water Supply

E. ENVIRONMENTAL IMPACTS

1. Noise

Noise generated from the proposed project will occur as a result of construction activities associated with site preparation and sounds which emanate from the operational characteristics of the industrial users.

No unusual construction noise should occur since the site is free of structures which would require demolition.

The planned industrial users are not anticipated to have any unusual sounds resulting from their activities.

Possible noise impact from the project upon noise sensitive uses, e.g., stationary and mobile noise sources affecting the apartments and park areas beyond the northern and northeastern property lines will be addressed. Increased traffic noise on Kalaeloa Boulevard will be evaluated. Recommendations for mitigation measures will be provided if required. The impact of local noise regulations (State, DOH and City and County of Honolulu LUO) will be addressed as well as OSHA noise regulations in the EIS process.

-23-
2. **Air Quality**

   a. **Air Pollution Sources**

   The industrial park has a variety of existing stationary air pollution sources which emit the major regulated pollutants:

   - sulfur dioxide (SO2)
   - nitrogen dioxide (NO2)
   - particulate matter (PM)
   - carbon monoxide (CO)
   - volatile organic compounds (VOC)

   In addition, the EPA's Toxic Release Inventory (TRI) for 1987 indicated that facilities at the park also emit lesser quantities of a variety of organic and inorganic compounds to the air.

   Three new major sources are planned for the park in the near future. The City's HPower resource recovery facility is already under construction and a large gas turbine and a coal-fired power plan are currently in the permitting process.

   There are also mobile sources, i.e., motor vehicle activity, in the vicinity due to the park itself and nearby residential areas. In the future, this source category will grow significantly due to the City's intent to make the Ewa area the next urban center. Other mobile sources include ship traffic at the harbor and aircraft activity at the nearby Barbers Point Naval Air Station.

   Finally, there is still ongoing sugar cane cultivation in the Ewa area with its accompanying fugitive dust from vehicle activity and smoke emissions from field burning. This will probably decline as the area urbanizes.
b. Existing Air Quality

Even with this variety of industrial, agricultural, residential, and military activity in the area air quality is currently in compliance with both state and federal ambient air quality standards based on the most recent State Department of Health monitoring data from its Barbers Point monitoring station. Because of the already planned expansion and the consumption of pollutant standards, especially SO2 and PH, careful attention is being paid to the types of new sources and the control technology employed.

c. Local Meteorology And Terrain Effects

On an annual basis prevailing northeasterly trade winds tend to keep maximum annual pollutant concentrations near the shoreline or over the water in the industrial park area. On a daily basis, however, the nearshore location causes a land seabreeze regime to predominate resulting in pollutant plumes being carried inland during the day and offshore at night. Kona (southerly) winds during the winter months also carry plumes inland. High terrain north-northeast of the project site can result in plume impingement and higher pollutant concentrations. Low annual rainfall reduces the washout of particulates and soluble gases and increases the potential for fugitive dust.

d. Anticipated Impacts

The proposed industrial/commercial use of the specified lands has the potential for increased emissions of regulated and unregulated toxic air pollutants from the following sources:
- new stationary sources and mobile source activity in the 423.59-acre Industrial area.

- mobile source activity in the 109.30-acre Maritime Industrial area plus possibly new stationary sources.

- mobile source activity in the 19.20-acre Commercial area.

The project area itself may be impacted by existing industrial, commercial, and agricultural sources.

There will be short-term construction impacts as the sites are developed and new sources are constructed. This will involve fugitive dust, vehicles, generators, etc. There will also be offsite impacts due to production of concrete and asphalt for the site.

Finally, there may be long-term offsite impact due to electrical generation to meet the demands of the new industrial/commercial activities on the project site.

3. Compatibility with Surrounding Environment

The proposed development for the project site will augment the industrial activities of the new harbor, as well as nearby Kapolei City.

The height of the industrial structures will be well within the 60 foot height limit established by the Ewa Development Plan. Consideration will be taken to avoid structure heights causing any adverse impacts on coastal views, residential viewing corridors, or apartment areas mauka of the site.
The proposed development will replace the agricultural activity with an urban/built environment. Alteration to the present viewing experience may, therefore, be anticipated. The degree of alteration and encroachment into the existing view plane shall be assessed through photographic and cross sectional studies.

Primary issues to be investigated in the view assessment will include:

- Potential building height encroachment into the viewing plane as seen from the H-1 Freeway. The assessment will include the relationship between the freeway elevations assumed finish grade of the property and the general building height limit of 60 feet as established for the area.

- Potential view impacts as seen from the Makakilo residential area.

- Urban design controls which may mitigate the determined view impacts. Urban design controls shall consider the overall visual effects of the proposed development as seen from off-site locations (freeway, Makakilo) as well as on-site visual impacts and potential mitigative measures.

Site layout will be sensitive to the design standards adopted for industrial establishments located within the Campbell Industrial Park. Covenants, restrictions as well as design guidelines will be prepared to ensure that the industrial development will maintain high standards, ensure minimal visual impacts, and ensure maximum compatibility with the surrounding areas.

4. Historic and Archaeological Resources

Construction of Barbers Point Harbor and the stockpiling of dredged material removed from the harbor basin has altered a large part of the western portion of the project area.
Extensive archaeological and paleontological salvage projects have been previously undertaken on much of the project site. Small portions on the south central part of the project area, however, remain relatively untouched by the recent land modifications. On the north side of Malakole Road, in particular, an area exists of possible undisturbed sinkholes. The scope of the study to be undertaken for the EIS process will include:

- Determination of present land conditions and location and identification of any archaeological/paleontological sites presently extant in the project area and assessment of their condition.

- Review of past archaeological/paleontological studies within the project area, particularly to address significance and potential of remaining features.

- Assessment of potential impacts of land reclassification and future development on the surviving archaeological sites.

- Location of sensitive areas which may contain buried cultural/paleontological materials, particularly related to the proposed drainage channel.

- Assessment of the scientific value of the remaining sinkhole area and development of a plan for their preservation as park and open space. Of particular importance will be the definitions of exact boundaries of the proposed park.

- Presentation of recommendations for addressing archaeological concerns in future development within the project area, including preservation areas possibly archaeological monitoring of some construction activities or other appropriate actions.
5. Natural Features
   a. Water Resources
      N/A
   b. Flood Plan Management
      Firm Zone designation "D".
   c. Wetlands Protection
      N/A
   d. Coastal Zone Management
      The site is not within the Special Management Area (SHA). The proposed use of the project is consistent with the present use of the general area, where a harbor and industrial area already exists.
      The proposed project does not adversely impact any of the Coastal Zone Management (CZH) program objectives and policies.
   e. Unique Natural Features
      The site is essentially flat with coral as the basic soil type. Undisturbed sinkholes may exist in the area.
   f. Vegetation and Animal Life
      Flora
      Approximately 50% of the project site is under active cane cultivation. While abandoned cane fields in various stages of weedy succession account for roughly 30% of the site. Klawe forests and somewhat maintained plantings around the Hawaii Raceway Park cover the remainder of the
property. Weedy species, primarily introduced grasses and annuals, are more or less confined to the margins of fields, canehaul roads, and along drainageways. To the east of Kalaeloa Boulevard and between the desalination plant and the raceway park are found most of the abandoned canefields. The fields are overgrown with dense buffel grass and scattered shrubs of koa-haole. More recently abandoned fields near the industrial park entrance support a dense cover of Pluchea Shrubs. The kiawe forests are composed of open stands of trees generally with koa-haole shrubs. Buffel grass and the native ilima are abundant in these areas. Most of the kiawe forests are secondary growth forests. Evidence of past disturbances such as old roads, bulldozed piles of rubble, and old metal and lumber can be found.

A botanical survey will be conducted to gather information on the general vegetation types and also to inventory the botanical resources. A search will also be made for endangered, threatened, and rare plant species. Potential environmental problems or concerns will be identified and possible mitigation measures proposed.

Fauna

A bird and mammal field survey was conducted to evaluate the possible changes that might occur in the bird and mammal populations following the proposed development on the property. An effort was made to census the specific area of the property designated as a "drainage ditch." No endemic lands and birds were recorded during the course of the field survey. The Hawaiian Owl or Pueo and the Hawaiian Stilt are the only likely endemic species which might forage in the area.
No resident indigenous land birds were recorded. The only potential species is the Black-crowned Night Heron. No seabirds were found during the survey and it is unlikely any would nest at this site due to an abundance of predators. The Great Frigatebird may be seen overhead. A total of 17 species of exotic birds were found during this field survey. Exotic species sometimes prosper for a time only to later disappear or become a less significant part of the ecosystem.

The present environment provides a limited range of habitats which are utilized by the typical array of exotic birds one would expect at this elevation and in this type of environment on Oahu.

Doves and finches could decline in abundance as a result of changes to the habitat brought about by the proposed development. House sparrows and Common Myna should increase in abundance following urbanization.

Observations did not reveal any unusual mammal activity. The drainage canal did not reveal any unusual or distinctive habitat nor did the fauna found in this area differ significantly from that recorded elsewhere on the property. The complete Fauna Survey will be incorporated into the EIS that will be prepared.

g. Agricultural Lands

The project site is classified Agricultural land under the State Land Use District Regulations. A portion of the site is currently in cane production. Oahu Sugar Company has a lease agreement with Campbell Estate that is due to expire in 1995. Impacts, if any, this project, when combined with housing and other developments, will have an OSCO's acreage will be addressed in the EIS.
Further, the agricultural analysis will address the quality of the affected soils for agriculture, site characteristics for agriculture, OSCo acreage subject to urban pressures, OSCo's land requirements, the preferred sequence for contracting plantation operations, the impact of the project on OSCo's employment, land requirements for diversified agriculture versus land availability, replacement of tree operations, and the consistency of the project with State and County goals, objectives, and policies.

Much of the remaining soil type is coral outcrop which is not adequate for crop production. Based on the various soil classification systems which rate Hawaii soils, little of the property has good soils (from 0 to less than 25% depending on the particular soil rating system).

h. Open Space

A portion of the property is in agricultural cultivation. An assessment of the visual impacts from the residential areas located within the Hakakilo community as well as the viewing plane from the H-1 Freeway will be conducted. See discussion, Section E.3.

6. Hazards

a. Harbor Safety Buffer Zone

The project site is not within the safety zone area established by the State Department of Transportation for the harbor area.

b. Thermal Explosives

N/A
c. Industrial Scrap Metal

A site has been identified as containing slag and heavy material. Principals are aware of the situation and action is presently being taken to mitigate the condition. Details on actions taken will be provided during the EIS process.

d. Airport Clear Zone (APZ).

N/A

F. ALTERNATIVES CONSIDERED

No other alternative was considered. The lease with OSCo for the lands in cane production is due to expire in 1995. Much of the remaining property is unsuited for agricultural pursuits because of poor soils or their location adjoining the new harbor area. As mentioned previously, the area is ideally suited for expansion of the JCIP and nearby harbor.

G. PROPOSED MITIGATION MEASURES

Appropriate mitigative measures will be included in the environmental studies that will be conducted during the preparation of the EIS.

H. SUMMARY

The proposed commercial, and maritime and intensive industrial project will complement and expand the operational development of the new Barbers Point Harbor. The project will further enhance the economic viability of the area by providing industrial and commercial lands close to Kapolei City, Ewa, and the James Campbell Industrial Park.

Incremental development of the land based facilities for the harbor will assist in carrying out State and City and County objectives and policies by increasing support facilities to accommodate transshipment and storage needs.

-33-
I. DETERMINATION

Based on the scope of the project and the anticipated impacts, it is likely that a determination will be made by the Department of General Planning that the proposed amendment will require the preparation of an EIS. The Department of General Planning will be Accepting Authority.

VI. NOTIFICATION REQUIREMENTS

A. The following parties have been furnished with a copy of the Summary Sheet and a map of the proposed amendment:

1. The Honorable John Desoto
   District Councilman
   Honolulu Hale
   Honolulu, Hawaii 96813

2. Ewa Beach Neighborhood Board #23
   P.O. Box 2392
   Ewa Beach, Hawaii 96796

3. Cook Inlet Region Inc.
   P.O. Drawer 4N
   Anchorage, Alaska 99509

   Chevron U.S.A. Inc./Property Tax
   P.O. Box 7611
   San Francisco, California 94120

5. Mr. Don Kochi
   Deputy Director of Transportation
   Harbors Division
   79 South Nimitz Highway
   Honolulu, Hawaii 96813

6. Ewa Beach Community Association
   Mr. Charles Beamer, President
   P.O. Box 3
   Ewa Beach, Hawaii 96706

7. Assistant Base Civil Engineer
   Mr. W. K. Liu
   Department of the Navy
   Commander, Naval Base Pearl Harbor
   Box 110
   Pearl Harbor, Hawaii 96850-5020
8. Ms. Jane Ross, Secretary  
Honokal Hale Community Association  
c/o 92-783 Laaloa Place  
Ewa Beach, Hawaii 96707

9. Mr. Wallace Zoller, President  
Hakakilo Community Association  
c/o 92-714 Palailai Street  
Ewa Beach, Hawaii 96707

B. Certification

Ordinance 84-111 states:

No application for Development Plan Land Use Map amendment shall be accepted for processing unless the applicant notifies, by mail, all owners, lessees, sub-lessees and residents of the affected property and of each abutting parcel.

I hereby certify that I have complied with the notification requirements of Ordinance 84-111.

WILLIAM E. WANKET  
Agent for  
THE ESTATE OF JAMES CAMPBELL
VII. PROPOSED NOTIFICATION LIST FOR THE EIS PREPARATION NOTICE (EISPN)

This project will most likely require preparation of an EIS. Thus, this document will probably serve as the EISPN. Listed below is a proposed list of parties to be consulted during the EIS process, subject to revision and approval by DGP:

Federal Agencies

Department of Agriculture, Soil and Conservation Service
Department of the Army, U.S. Army Engineer District, Honolulu
Department of the Navy, Naval Base Pearl Harbor
Department of the Interior, Fish and Wildlife Service
Department of Transportation, Federal Aviation Administration, Airports District Office

State and County Agencies

Department of Accounting and General Services
Department of Agriculture
Department of Business and Economic Development
Department of Education
Department of Health
Department of Land and Natural Resources, Historic Preservation Office
Department of Transportation
Land Use Commission
Office of Environmental Quality Control
Office of Hawaiian Affairs
Office of State Planning
University of Hawaii, Water Resources Research Center
Environmental Center
Oahu Metropolitan Planning Organization
Department of General Planning
Department of Housing and Community Development
Department of Land Utilization
Department of Parks and Recreation
Department of Public Works
Department of Transportation Services
Board of Water Supply
Fire Department
Police Department

-36-
Public Utilities

Hawaiian Telephone Company
Hawaiian Electric Company

Neighborhood Boards, Community Association

Ewa Neighborhood Board No. 23
Ewa Beach Community Association
Friends for Ewa
Honokai Hale/Nanakai Gardens Community Association
Makakilo Community Association
Waianae Coast Neighborhood Board No. 24

Islandwide Organizations

Hawaii's Thousand Friends
Land Use Research Foundation
League of Women Voters
Outdoor Circle

Other

Oahu Sugar Company, Ltd.
VIII. LIST OF CONSULTANTS INVOLVED IN PREPARATION OF DP EA

This report was prepared for Campbell Estate by William E. Wanket, Inc. The following identifies the consultants involved in the preparation and their respective contributions. These consultants will also participate in the preparation of the EIS.

<table>
<thead>
<tr>
<th>FIRM</th>
<th>TASK</th>
<th>INDIVIDUAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>William E. Wanket, Inc.</td>
<td>Primary Author/Consultants</td>
<td>William E. Wanket</td>
</tr>
<tr>
<td></td>
<td>Coordinator</td>
<td></td>
</tr>
<tr>
<td>Char and Associates</td>
<td>Botanical Survey</td>
<td>Winona Char</td>
</tr>
<tr>
<td>Cultural Surveys Hawaii</td>
<td>Archaeological Survey</td>
<td>Dr. Hallett Hammatt</td>
</tr>
<tr>
<td>Michael S. Chu</td>
<td>Land Architect</td>
<td>Michael S. Chu</td>
</tr>
<tr>
<td>Earthplan</td>
<td>Social Impact</td>
<td>Berna Cabacungan</td>
</tr>
<tr>
<td>Pacific Planning &amp;</td>
<td>Traffic Impact</td>
<td>Sherrie Lum</td>
</tr>
<tr>
<td>Engineering, Inc.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Decision Analysts Hawaii,</td>
<td>Agricultural Impact/Fiscal Impact</td>
<td>Bruce Plasch</td>
</tr>
<tr>
<td>Inc.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Darby &amp; Associates</td>
<td>Noise Impact</td>
<td>Ron Darby</td>
</tr>
<tr>
<td>Engineering Concepts, Inc.</td>
<td>Engineering/Maps</td>
<td>Craig Arakaki</td>
</tr>
<tr>
<td>Phillip L. Bruner</td>
<td>Survey of Avifauna and Feral Mammals</td>
<td>Phillip L. Bruner</td>
</tr>
<tr>
<td>Lani Nedbalek</td>
<td>Consultant</td>
<td>Lani Nedbalek</td>
</tr>
</tbody>
</table>

-38-
<table>
<thead>
<tr>
<th></th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>LOCATION/BOUNDARY MAP</td>
</tr>
<tr>
<td>2.</td>
<td>PROPOSED DEVELOPMENT PLAN LAND USE MAP</td>
</tr>
<tr>
<td>3.</td>
<td>EXISTING DEVELOPMENT PLAN LAND USE MAP</td>
</tr>
<tr>
<td>4.</td>
<td>EXISTING DEVELOPMENT PLAN PUBLIC FACILITIES MAP</td>
</tr>
<tr>
<td>5.</td>
<td>EXISTING ZONING MAP</td>
</tr>
<tr>
<td>6.</td>
<td>PROPOSED ZONING MAP</td>
</tr>
<tr>
<td>7.</td>
<td>EXISTING LAND USES</td>
</tr>
<tr>
<td>8.</td>
<td>TOPO MAP</td>
</tr>
<tr>
<td>9.</td>
<td>SOILS MAP</td>
</tr>
<tr>
<td>10.</td>
<td>FLOOD ZONE MAP</td>
</tr>
</tbody>
</table>
November 25, 1989

Mr. Kazu Hayashida
Manager and Chief Engineer
Board of Water Supply
City and County of Honolulu
630 South Beretania Street
Honolulu, Hawaii 96843

RE: Environmental Impact Statement Preparation Notice (EISPN)
for Proposed Kapolei Business-Industrial Park — Response to Comments Received

Dear Mr. Hayashida:

Thank you very much for taking the time and effort to review the above-referenced EISPN. Our responses to the comments offered are provided:

1. A water master plan for the Kapolei Business-Industrial Park is currently being prepared and will be submitted to the Board of Water Supply for approval. The hydraulic analysis for the master plan will include flows for the existing industrial park, Kapolei City, Camp Malakole, and the Barbers Point Harbor.

2. Construction of the offsite water facilities will be coordinated through the Eva Plains Water Development Corporation of which the Estate of James Campbell is a member. It is intended that the offsite improvements follow the recommendations of the Eva Master Plan by Belt, Collins and Associates. These recommendations will be provided in the forthcoming Draft EIS.
Potable water for the proposed development is intended to be provided by the Honolulu Wells as identified in the Ewa Water Master Plan. Currently, five wells have been completed producing 5.6 million gallons of water per day. A sixth well is due to come on line shortly, bringing the water supplied by this well field up to approximately 6.7 mgd. A portion of this total is intended for the proposed development. Additional sources of potable water are currently being investigated to meet the demands of the developments in the Ewa Plains.

Sincerely,

WILLIAM E. WANKET
November 6, 1989

Ms Esther Ueda
Executive Officer
State Department of Business and
Economic Development
Land Use Commission
335 Merchant Street
Room 104
Honolulu, HI 96813

RE: Environmental Impact Statement Preparation Notice (EISPN) for
Proposed Kapolei Business-Industrial Park - Response to
Comments Received

Dear Ms Ueda:

Thank you very much for taking the time to review the above-referenced EISPN. We appreciate your suggestion that a boundary interpretation be obtained from your office. We will, indeed, contact your office to clarify property land use boundaries prior to filing any petitions for a district boundary amendment. We will continue to coordinate our development with your office to ensure that you have the opportunity to comment on the proposed Kapolei Business-Industrial Park.

Sincerely,

William E. Wanket

Pacific Tower
Suite 660
1001 Bishop Street
Honolulu, HI 96813
Phone
(808) 523-4937
FAX 521-8410
November 15, 1989

Mr. William E. Wanket, President
William E. Wanket, Inc.
Pacific Tower, Suite 660
1001 Bishop Street
Honolulu, Hawaii 96813

Dear Mr. Wanket:


Thank you for the opportunity to review and comment on the EISPN on the proposed industrial and commercial development.

We have the following comments to offer:

1. A water master plan for the Kapolei Business-Industrial Park should be submitted for our review and approval. The water master plan should include the existing Campbell Industrial Park, Kapolei Town Center, Camp Malakole, and the future Deep Draft Harbor.

2. The construction of the off-site water facilities should be coordinated with the Ewa Plains Water Development Corporation. The source of water for the proposed development should be indicated in the EIS.

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

Very truly yours,

KAZU HAYASHIDA
Manager and Chief Engineer

Pure Water ... man's greatest need - use it wisely
October 9, 1989

Mr. William E. Wanket
Pacific Tower, Suite 600
1001 Bishop Street
Honolulu, Hawaii 96813

Dear Mr. Wanket:

Ewa Development Plan Amendment Application from Agriculture to Industrial and Commercial Use for the Kapolei Business Park
TMK: 9-1-14: Por. 2 and 9-1-15: 1, 13, and 16
DGP File No. 89/E-2

This is to inform you that your request to amend the Ewa Development Plan (DP) will be processed in the 1990 Annual Amendment Review.

Your request for a DP amendment was subject to an environmental assessment pursuant to Chapter 343, HRS, the State Environmental Impact Statement (EIS) law. It has been determined that an EIS will be required for the proposed development.

The State Office of Environmental Quality Control has been notified of our determination. They will be publishing a notice in their "OEQC Bulletin".

In your application for a DP amendment, please indicate why two areas designated for Agricultural use, one near Barbers Point Harbor and the other above the OR&L right-of-way, were omitted from the application.

If there are any questions, please contact Randy Hara of my staff at 523-4483.

Sincerely,

[Signature]
DONALD A. CLEGG
Chief Planning Officer

DAC:ft
November 9, 1989

Mr. Donald A. Clegg  
Chief Planning Officer  
City and County of Honolulu  
Department of General Planning  
650 South King Street  
Honolulu, Hawaii 96813

RE: DGP File No. 89/B-2: Development Plan Amendment Application from Agriculture to Industrial and Commercial Use for the Kapolei Business-Industrial Park

Dear Mr. Clegg:

Thank you for your letter regarding the above-referenced Development Plan Amendment Application. In response to your inquiry regarding Application omission of two areas designated for Agricultural use: "one near Barbers Point Harbor and the other above the ORAL right-of-way," the following information is provided:

The State Department of Transportation is in the process of preparing a Development Plan Amendment Application on 83.9 acres of adjoining Barbers Point Harbor land. (The Application was filed with DGP on November 9, 1989.) The area above the ORAL is not deemed for amendment action at the present time, and remains designated Agriculture. This area is presently undergoing planning studies to determine the most appropriate use of the land.

The statements regarding these two areas will be provided in our forthcoming Draft Environmental Impact Statement.

Sincerely,

[Signature]

WILLIAM E. WANKET

[Address]
November 21, 1989

Mr. William E. Wanket  
Pacific Tower 660  
1001 Bishop Street  
Honolulu, Hawaii 96813

Dear Mr. Wanket:

Environmental Impact Statement Preparation Notice (EISPN)  
Proposed Kapolei Business-Industrial Park; Ewa, Oahu

We have reviewed the EISPN and have the following comments:

1. **Drainage:** The EIS should include a drainage study, describing the project's contribution to various watersheds and channels discharging to the ocean.

2. **Water Quality and Marine Biota:** The EIS should include a study of the amount and constituents of drainage flows, both during construction and long-term and should assess the potential impacts on coastal water quality and marine biota. In so doing, the EIS should consider the cumulative impact of increased direct discharges to the ocean from this and other existing and proposed projects along the Barber's Point shoreline.

We appreciate the opportunity to comment. If you have any questions, please contact Mr. Robin Foster of our staff at 527-5027.

Very truly yours,

[Signature]

JOHN P. WHALEN  
Director of Land Utilization

JPH:s1  
0293N/32  
cc: DGP
November 25, 1989

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

RE: Environmental Impact Statement Preparation Notice (EISPN) for Proposed Kapolei Business-Industrial — Response to Comments Received

Dear Mr. Whalen:

Thank you very much for taking the time and effort to review the above referenced EISPN. Our responses to the comments offered are provided:

1. A hydrologic analysis will be included in the Draft EIS which identifies watershed information and impacts of the proposed project. A drainage master plan will also be prepared and submitted to the Department of Public Works for their approval.

2. A major element of the drainage system for the proposed Kapolei Business-Industrial Park is a large drainage channel traversing the site from the railroad right-of-way to the ocean. A portion of the channel will encroach into the conservation district (shoreline) and SMA area requiring preparation of an environmental assessment to obtain various permits. The portion of the channel requiring the permits falls outside of the amendment area and, thus, requires a separate study. A supplemental EIS is being prepared for the drainage channel which will address drainage flows and the potential impacts on coastal water quality and marine biota. Adjacent developments will be considered in the analysis.

Sincerely,

WILLIAM E. WANKET
November 7, 1989

Mr. William E. Wanket, President
William E. Wanket, Inc.
1001 Bishop Street
Pacific Tower, Suite 660
Honolulu, Hawaii 96813

Dear Mr. Wanket:

Subject: Development Plan Amendment/
Environmental Impact Statement Preparation Notice
for Proposed Kapolei Business Park

Thank you for the opportunity to review the above-mentioned EIS. We suggest that the following concerns be addressed:

1. Since there are several hundred acres of unused, brush-covered, industrial-zoned land mauka of the Hawai'i Raceway Park site, the need to zone additional land for industrial uses should be addressed.

2. To commit the existing Hawai'i Raceway Park site to other uses is premature until a permanent site is found for an O'ahu motor sports facility. The timing of Development Plan amendments and rezoning is, therefore, of concern.

Sincerely,

[Signature]

WALTER M. OZAWA, Director

cc: Department of General Planning
December 4, 1989

Mr. Walter M. Ozawa
Director
Department of Parks and Recreation
650 South King Street
Honolulu, Hawaii 96813

RE: Environmental Impact Statement Preparation Notice (EISP/N)
for Proposed Kapolei Business-Industrial Park – Response to
Comments Received

Dear Mr. Ozawa:

Thank you very much for taking the time and effort to review the
above-referenced EISP/N. Our responses to the comments offered are
provided:

Need for additional land for industrial uses.

The Draft EIS will present the findings of our Marketing Consultant,
John Zapotocky, on the need for additional industrial land in the Ewa
Development Plan area through the year 2010. It should be noted that
our application is for a development plan amendment. Prior to seeking
zoning, we will still need approval of a land use boundary change to
Urban by the Land Use Commission.

Hawaii Raceway Park

The proposed project is part of a 20-year plan by the Estate of James
Campbell for their Ewa Plains land. The Draft EIS that is being prepared
will acknowledge City and County of Honolulu City Council Resolution
89-309 proposing to amend the Ewa Development Plan Public Facilities Map
to add a Park symbol on the existing Hawaii Raceway Park. The redesigna-
tion of this land for industrial purposes on the DP should have no effect
on future City Council actions regarding this site. It should also be
noted that the Hawai'i Raceway Park is currently zoned AG-2 General Agricultural District, a zoning district under the Land Use Ordinance (LZO) that does not permit automobile race tracks.

I will continue to coordinate our project with you to ensure that you have the opportunity for further review and additional comments.

Sincerely,

WILLIAM E. WANKET
November 8, 1989

Mr. William E. Wanket, President
William E. Wanket, Inc.
Pacific Tower 660
1001 Bishop Street
Honolulu, Hawaii 96813

Dear Mr. Wanket:

Subject: Environmental Impact Statement Preparation Notice (EISPN)
Kapolei Business - Industrial Park
TMK: 9-1-14: 2 (Por.); 9-1-15: 1, 13, and 16

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

1. The flows from the industrial park were not considered in the proposed interceptor. Therefore, coordination with the developers of the Ko Olina will be required.

2. Tenants of the proposed Business-Industrial Park will be required to submit Industrial Wastewater Discharge Applications before connection to the Honouliuli Wastewater Treatment plant is considered.

3. Should the temporary treatment plant alternative be implemented, the EIS should address the disposal of the effluent. Also, a certified operator of the plant is required.

4. A drainage report should be submitted to Drainage Section, Division of Engineering, for review and approval.

Very truly yours,

[Signature]
SAM CALLEJO
Director and Chief Engineer
November 16, 1989

Mr. Sam Callejo
Director and Chief Engineer
City and County of Honolulu
Department of Public Works
650 South King Street, 4th Floor
Honolulu Hawaii 96813

RE: Environmental Impact Statement Preparation Notice (EISP) for Proposed Kapolei Business-Industrial Park - Response to Comments Received

Dear Mr. Callejo:

Thank you for your letter regarding the above-referenced Development Plan Amendment Application. Our responses to the comments offered are provided:

1. The existing Segment 1 of the Ko Olina interceptor from Kalaeloa Boulevard to Barbers Point Access Road has accounted for flows from Campbell Estate's proposed Kapolei City project. It is anticipated that the initial development of the Kapolei Business-Industrial Park can share in the allotment for Kapolei City. Ultimately, a relief sewer parallel to Segment 1 of the Ko Olina interceptor will be required.

Segment 2 of the Ko Olina interceptor from Barbers Point Access Road to the Honouliuli Wastewater Treatment Plant is currently being revised to include all of Campbell Estate's development in the area as well as Kapolei Villages and Kapolei Knolls. Coordination with all the affected parties is ongoing.

Pacific Tower
Suite 650
1001 Bishop Street
Honolulu, HI 96813
Phone
(808) 533-4937
FAX 521-5410
2. Reference to industrial waste requirements will be added to the Draft EIS (DEIS) presently being prepared.

3. Discussion on effluent disposal will be included in the DEIS. In general, the alternatives identified for effluent disposal include percolation ponds, injection wells, and reuse for irrigation. All government requirements for the temporary treatment plant, including those concerning certified operators, will be complied with.

4. A drainage master plan for the Kapolei Business-Industrial Park will be submitted to the Drainage Section, Division of Engineering, for review and approval.

We will continue to coordinate our development with your office to ensure that you have the opportunity to comment on the DEIS for the proposed Kapolei Business-Industrial Park.

Sincerely,

WILLIAM E. WANKET
November 28, 1989

William E. Wanket, Inc.
Pacific Tower, Suite 660
1001 Bishop Street
Honolulu, Hawaii 96813

Attention: Mr. William E. Wanket, President

Gentlemen:

Subject: Kapolei Business - Industrial Park
Environmental Impact Statement
Preparation Notice
TMK: 9-1-14: 1 (Por) and 9-1-15: 1, 13 and 16

This is in response to your letter of October 20, 1989 requesting our comments on the EIS-PN for the subject project.

Our department would like to be consulted for comments during the preparation of the EIS. A copy of the Ewa Transportation Master plan affecting the area in the vicinity of this project should be submitted with the EIS. The study should include a determination of the adequacy of the internal streets servicing the project as well as those streets having access to the site. The study should also specify the ultimate ownership of all new roadways and identify traffic issues of general concern.

Very truly yours,

[Signature]
Director
December 6, 1989

Mr. Alfred J. Thiede
Director
Department of Transportation Services
Honolulu Municipal Building
650 South King Street
Honolulu, Hawaii 96813

RE  Environmental Impact Statement Preparation Notice (EISPIN) for Proposed Kapolei Business-Industrial Park – Response to Comments Received

Dear Mr. Thiede:

Thank you very much for taking the time to review the above-referenced EISPIN. Our responses to the comments offered are provided:

The traffic impact analysis that will be included in the Draft EIS will address the project's impact on traffic on surrounding roadways; it will analyze capacity problems, and it will identify possible mitigating actions. Public ownership of the roads is intended. Close coordination will be maintained with appropriate agencies as additional road details are developed.

The Ewa Region Transportation Master Plan has been funded and approved to include traffic forecasts and preliminary regional network layout. The region's developers as well as state and county agencies are members of the Master Plan's oversight group. Continuing coordination and technical work is now in progress. The complexity of developing the Plan as well as the difficult coordination needs among the various parties requires a fairly lengthy schedule. Recognizing this, the transportation agencies have approved other projects in the region with the condition that the Developer participate in the Master Plan effort and pay its fair share of the required improvements set forth in the Plan. As a supporting member of the Transportation Plan Group, the Estate of James Campbell will continue to participate in this effort until its full share of obligation is satisfied.

Sincerely,

WILLIAM E. WANKET

WILLIAM E. WANKET

Pacific Tower
Suite 650
1001 Bishop Street
Honolulu, HI 96813
Phone
(808) 533-4937
FAX 521-5410
October 27, 1989

William E. Wanket, Inc.
Pacific Tower 600
1001 Bishop Street
Honolulu, Hawaii 96813

Gentlemen:

SUBJECT: EIS Preparation Notice
Kapolei Business-Industrial Park
Ewa, Hawaii

We have reviewed the subject material and have no comments.

Very truly yours,

FRANK K. KAHOOHANOHANO
Fire Chief

MZ:ny
November 6, 1989

Mr. Frank Kahooloahano
Fire Chief
Fire Department
1455 S. Beretania Street
Room 305
Honolulu, Hawaii 96814

RE: Environmental Impact Statement Preparation Notice (EISPN)
for Proposed Kapolei Business-Industrial Park - Response to
Comments Received

Dear Mr. Kahooloahano:

Thank you very much for taking the time to review the above-referenced EISPN. We will continue to coordinate our development with your office to ensure that you have the opportunity to comment on the proposed Kapolei Business-Industrial Park.

Sincerely,

WILLIAM E. WANKET

Pacific Tower
Suite 660
1001 Bishop Street
Honolulu, HI 96813
Phone
(808) 533-4937
FAX 521-5410
November 14, 1989

Mr. William E. Wanket, President
William E. Wanket, Inc.
Pacific Tower 660
1001 Bishop Street
Honolulu, Hawaii 96813

Dear Mr. Wanket:

Subject: Development Plan Land Use Amendment for Kapolei Business Park

We have reviewed the proposal to amend the Development Plan for the Kapolei Business Park and find that the change in land use designation will not significantly impact police services provided for that area.

Thank you for the opportunity to comment.

Sincerely,

DOUGLAS G. GIBB
Chief of Police

By
JOSEPH AVEIRO
Assistant Chief of Police
Support Services Bureau
November 17, 1989

Chief Douglas G. Gibb
Chief of Police
City and County of Honolulu
Police Department
1455 South Beretania Street
Honolulu, Hawaii 96814

RE: Environmental Impact Statement Preparation Notice (EISPN) for Proposed Kapolei Business-Industrial Park - Response to Comments Received

Dear Chief Gibb:

Thank you very much for taking the time and effort to review the above-referenced EISPN. We will continue to coordinate our project with you to ensure that you have the opportunity to provide any additional comments.

Sincerely,

WILLIAM E. WANKET
November 21, 1989

William E. Wanket, Inc.
William E. Wanket, President
Pacific Tower 660
1001 Bishop Street
Honolulu, Hawaii 96813

Dear Mr. Wanket:

The Board of Directors of the Ewa Beach Community Association, at its November meeting, recommended approval of the proposed Kapolei Business-Industrial Park in Ewa, Oahu, Hawaii.

Very truly yours,

[Signature]
Charles "Dick" Beamer, Ph.D.
President
Ewa Beach Community Association
November 24, 1989

Mr. Charles "Dick" Beamer, Ph.D.
President
Ewa Beach Community Association
P.O. Box 2003-0003
Ewa Beach, Hawaii 96706

RE: Environmental Impact Statement Preparation Notice (EISPN)
for Proposed Kapolei Business-Industrial Park – Response to
Comments Received

Dear Dr. Beamer:

Thank you very much for the time and effort taken by the Board of
Directors of the Ewa Beach Community Association to review and discuss
the above-referenced EISPN, and for your expression of approval for the
proposed Kapolei Business-Industrial Park project. We will continue
to coordinate our development with you to ensure that you have the
opportunity to provide any comments on the proposed development.

Sincerely,

WILLIAM E. WANKET
ALAN C. ZIEGLER, Ph.D.
Zoological Consultant

45-636 Liula Place
Kāne‘ohe, Hawai‘i 96744

Telephone:
(808) 247-5318

24 November 1989

William E. Wanket,
Land Use Consultant
1001 Bishop Street,
660 Pacific Tower
Honolulu, Hawai‘i 96813

Dear Mr. Wanket,

As a follow-up to my telephone conversation with your office on 22 November 1989, I am submitting for your files this letter as a request to be a consulted party in the EIS preparation for the following 'Ewa, O'ahu, project, as published in the DEGC BULLETIN of 23 October 1989:

PROPOSAL FOR DEVELOPMENT PLAN AMENDMENT FOR
KAPOLEI BUSINESS-INDUSTRIAL PARK

May I express my appreciation of your office's thoughtfulness in providing me with a copy of the Environmental Assessment for the project.

Thank you very much for your kind attention in this matter!

Sincerely,

[Signature]

Alan C. Ziegler
December 6, 1989

Dr. Alan C. Ziegler
45-636 Liula Place
Kaneohe, Hawaii 96744

RE: Environmental Impact Statement Preparation Notice (EISPN) for Proposed Kapolei Business-Industrial Park – Response to Comments Received

Dear Dr. Ziegler:

Thank you very much for taking the time to inquire and subsequently to review the above-referenced EISPN. We will continue to coordinate our project with you to ensure that you have the opportunity for further review and comments.

Sincerely,

WILLIAM E. WANKET
November 17, 1989

Planning Branch

Mr. William E. Wanket
President
William E. Wanket, Inc.
Pacific Tower 660
1001 Bishop Street
Honolulu, Hawaii 96813

Dear Mr. Wanket:

Thank you for the opportunity to review the Environmental Impact Statement Preparation Notice for the proposed Kapolei Business-Industrial Park, Ewa, Oahu. The following comments are offered:

a. Any discharge of fill material into sinkholes may require a Department of the Army permit. If further information is needed regarding permit requirements, please contact Operations Branch (telephone 438-9258).

b. As the Environmental Assessment correctly notes on pages 21 and 29, the project area is located in Zone D (areas in which flood hazards are undetermined), as designated by the Federal Emergency Management Agency on the September 4, 1987 Flood Insurance Rate Map (FIRM).

Sincerely,

C. Cheung
Chief, Engineering Division
November 25, 1989

Mr. Kim Cheung
Chief, Engineering Division
Department of the Army
U.S. Army Engineer District,
Honolulu
Building 230
Ft Shafter, Hawaii 96856-5440

RE: Environmental Impact Statement Preparation Notice (EISPN) for Proposed Kapolei Business-Industrial – Response to Comments Received

Dear Mr. Cheung:

Thank you very much for taking the time and effort to review the above referenced EISPN. We appreciate your confirmation of our FIRM zone designation. Future permit requirements will be coordinated with your office.

We will continue to coordinate our project with you to ensure that you have the opportunity to provide any additional comments.

Sincerely,

WILLIAM E. WANKET

Pacific Tower
Suite 660
1001 Bishop Street
Honolulu, HI 96813
Phone
(808) 522-4937
FAX 521-5410
DEPARTMENT OF THE NAVY
COMMANDER
NAVAL BASE PEARL HARBOR
BOX 110
PEARL HARBOR, HAWAII 96860-0200

IN REPLY REFER TO:
11000
Ser 03(2021B)/2786
15 NOV 1989

Mr. William E. Wanket
William E. Wanket, Inc.
Pacific Tower, Suite 1010
1001 Bishop Street
Honolulu, HI 96813

Dear Mr. Wanket:

REQUEST TO AMEND THE EWA DEVELOPMENT PLAN LAND USE MAP
IN THE 1989 ANNUAL REVIEW

In response to your letters of September 23 and October 20, 1989, we have reviewed the proposed Ewa Development Plan Land Use Map amendment to change the land use designation of approximately 552.1 acres of property from Agriculture to Industrial and Commercial. Based on the proposed land uses for the property and its location, we are providing the following comments:

AIRFIELD CLEARANCE - The proposed map amendment site is adjacent to Naval Air Station (NAS) Barbers Point and is within an area where tall structures, such as towers could be a hazard to aircraft operations.

Enclosure (1) shows the map amendment site in relation to the Federal Aviation Regulations safety height criteria represented by imaginary surfaces through which objects around the airfield should not penetrate. The property is located under the 50:1 approach surface, the 7:1 transitional surface, the inner horizontal surface, and the 20:1 conical surface areas. The most restrictive of these surfaces is the 50:1 approach surface area where the top of structures should not exceed the sloping surface, which is approximately 89 feet in elevation (mean sea level datum) at a location about 3,000 feet from the end of Runway 11-29 (eastern end of project site). The Navy therefore requests that no structures which exceed 89 feet in height be permitted in the subject property.

NOISE - Enclosure (2) shows the map amendment site in relation to the recently completed Air Installations Compatible Use Zones (AICUZ) noise footprint for NAS Barbers Point. The proposed industrial area is located outside the 65 Ldn noise contours and the proposed commercial area is located outside the 55 Ldn noise contours. The proposed land use change presents no incompatibility with the Navy's AICUZ land use guidelines for NAS Barbers Point based on recent and foreseeable future aircraft operations.

However, it should be noted that the property is located under flight tracks of aircraft operating at this military airfield. Also, the AICUZ noise contours were developed based on current and known forthcoming changes to air operations at the Station. Military necessity may dictate future unforeseen changes in the types of aircraft supported, the tempo of operations, or the time of day during which those operations are conducted,
Subj: REQUEST TO AMEND THE EWA DEVELOPMENT PLAN LAND USE MAP IN THE 1989 ANNUAL REVIEW

that could increase the noise exposure in this area in the future. Accordingly, detailed plans for development should candidly appraise not only the existing noise environment and its actual impact on individual uses under consideration, but also the possibility of change.

The Navy's point of contact is Mr. Bill Liu at 471-3324. Thank you for the opportunity to comment on the proposed Ewa Development Plan Land Use Map amendment.

Sincerely,

[Signature]

Encl:
(1) Imaginary Surfaces
(2) 1989 AICUZ Map
November 17, 1989

Commander
Captain D. J. Nash (Code 03)
Naval Base Pearl Harbor
Box 110
Pearl Harbor, Hawaii 96860-5020

RE: Environmental Impact Statement Preparation Notice (EISP) for Proposed Kapolei Business-Industrial Park - Response to Comments Received

Dear Captain Nash:

Thank you very much for taking the time and effort to review the above-referenced EISP. Our responses to the comments offered are provided:

AIRFIELD CLEARANCE

The information provided was very useful and will be incorporated in the Draft EIS. Regarding heights, the Land Use Ordinance currently establishes a 60-foot height limit on adjoining lands in James Campbell Industrial Park (JCIP) and on lands adjoining the Barbers Point Harbor, which are zoned I-3 Waterfront Industrial. Therefore, it is expected that a similar height restriction will be applied to the project area.

NOISE

Our noise consultant's, Darby and Associates, findings concur with your findings that the project presents no incompatibility with the Navy's AICUZ land use guidelines for NAS Barbers Point. As the project proceeds through the various permit approval phases, we will continue to coordinate our project with you to ensure that you will have the opportunity to provide additional comments.

Sincerely,

WILLIAM E. WANKET

Pacific Tower
Suite 660
1001 Bishop Street
Honolulu, HI 96813
Phone (808) 533-4637
FAX 521-5410
United States Department of the Interior
FISH AND WILDLIFE SERVICE
PACIFIC ISLANDS OFFICE
P.O. BOX 59187
HONOLULU, HAWAII 96850

ES
Room 6307
October 25, 1989

William E. Wanket, Inc.
William E. Wanket, President
Pacific Tower 660
1001 Bishop Street
Honolulu, Hawaii 96813

Re: Environmental Impact Statement Preparation Notice for Kapolei Business-Industrial Park, Ewa, Oahu

Dear Mr. Wanket:

We have reviewed the referenced material dated October 20, 1989 and find that due to its nature, the proposed project will have no significant deleterious impact on fish and wildlife resources within our jurisdiction. Please do not hesitate to call on us if we may be of further assistance.

We appreciate this opportunity to comment.

Sincerely yours,

Ernest Kosaka
Field Office Supervisor
Environmental Services

cc: NMFS - WPPO
    DLNR
    EPA, San Francisco
November 6, 1989

Mr. Ernest Kosaka
Field Office Supervisor
United States Department of the Interior
Fish and Wildlife Service
Pacific Island Office
P.O. Box 50167
Honolulu, Hawaii 96850

RE: Environmental Impact Statement Preparation Notice (EISPN) for
Proposed Kapolei Business-Industrial Park - Response to
Comments Received

Dear Mr. Kosaka:

Thank you very much for taking the time to review the above-referenced
EISPN. We will continue to coordinate our development with your office
to ensure that you have the opportunity to comment on the proposed
Kapolei Business-Industrial Park.

Sincerely,

[Signature]

WILLIAM E. WANKET
Mr. William Wanket, President
William E. Wanket, Inc.
1001 Bishop Street
Honolulu, Hawaii 96813

Dear Mr. Wanket:

Subject: Kapolei Business-Industrial Park
EIS Preparation Notice

This is to inform your office that we wish to be consulted in the preparation of the subject EIS.

Should there be any questions, please contact Mr. Cedric Takamoto of the Planning Branch at 548-7192.

Very truly yours,

[Signature]

TEUANE TOMINAGA
State Public Works Engineer

CT:em
November 6, 1989

Mr. Teuane Tominaga  
State Public Works Engineer  
State Department of Accounting and  
General Planning, Division of  
Public Works  
P.O. Box 119  
Honolulu, HI 96810  

RE: Environmental Impact Statement Preparation Notice (EISPN)  
for Proposed Kapolei Business-Industrial Park - Response to  
Comments Received

Dear Mr. Tominaga:

Thank you very much for reviewing the above-referenced EISPN. Although  
we have no comments at this time concerning the project, we look forward  
to your review of the forthcoming Draft Environmental Impact Statement.

Sincerely,

WILLIAM E. WANKET

Pacific Tower  
Suite 660  
1001 Bishop Street  
Honolulu, HI 96813  
Phone  
(808) 533-4937  
FAX 521-5410
Mr. William E. Wanket, President
William E. Wanket, Inc.
Pacific Tower 660
1001 Bishop Street
Honolulu, Hawaii 96813

Dear Mr. Wanket:

Subject: Environmental Impact Statement Preparation Notice (EISPN) for
Kapolei Business-Industrial Park
The Estate of James B. Campbell
Ewa Development Plan Land Use Amendment Proposal
Agriculture to Industrial and Commercial
TMK: 9-1-14: por. 2
9-1-15: 1, 13, 16 Ewa, Oahu
Area: 552.1 acres

The Department of Agriculture has reviewed the subject document and offers the following comments.

According to the Preparation Notice (pages 7, 14, 31, 32), the EIS will be addressing most, if not all, the concerns that we have. In addition to the preferred sequence for contracting plantation operations (page 32), please discuss any plans to phase the development of the subject project so as to avoid unnecessarily disrupting final cultivation/harvesting of Oahu Sugar Company Field 004.

We look forward to reviewing the Draft EIS.

Thank you for the opportunity to comment.

Sincerely,

YUKIO KITAGAWA
Chairperson, Board of Agriculture

cc: Office of Environmental Quality Control
November 25, 1989

Mr. Yukio Kitagawa
Chairperson
Board of Agriculture
1428 South King Street
Honolulu, Hawaii 96814-2512

RE: Environmental Impact Statement Preparation Notice (EISPN)
for Proposed Kapolei Business-Industrial - Response to
Comments Received

Dear Mr. Kitagawa:

Thank you very much for taking the time and effort to review the
above referenced EISPN. Regarding your inquiry concerning develop-
ment phasing and the impact on Oahu Sugar Company's Field 004, the
landowner, The Estate of James Campbell, has and will continue to
discuss the phasing of their operations with Oahu Sugar Company.
The forthcoming Draft EIS will include a study by Decision Analysts
Hawaii, Inc. on the impact to agricultural lands.

We will continue to coordinate our project with you to ensure that
you have the opportunity to provide any additional comments.

Sincerely,

WILLIAM E. WANKET
November 28, 1989

William E. Wanket, Inc.
Pacific Tower 660
1001 Bishop Street
Honolulu, Hawaii 96813

Dear Mr. Wanket:

Thank you for the opportunity to respond to your Environmental Impact Statement Preparation Notice. At this time we have no comments but would like to reserve rights to comment during the preparation of your Environmental Impact Statement.

Should you have any questions, please call me at 543-2945.

Sincerely,

[Signature]

LLOYD HARAGUCHI
Project Coordinator
December 6, 1989

Mr. Lloyd Haraguchi  
Project Coordinator  
State Department of Budget and Finance  
Housing Finance and Development Corporation  
Seven Waterfront Plaza, Suite 300  
500 Ala Moana Boulevard  
Honolulu, Hawaii 96813

RE: Environmental Impact Statement Preparation Notice (EISPN)  
for Proposed Kapolei Business-Industrial Park — Response to Comments Received

Dear Mr. Haraguchi:

Thank you very much for taking the time to review the above-referenced EISPN. We will continue to coordinate our project with your office to ensure that you have the opportunity for further review and comments.

Sincerely,

WILLIAM E. WANKET
November 7, 1989

Mr. William E. Wanket
Land Use Consultant
Pacific Tower 660
1001 Bishop Street
Honolulu, Hawaii 96813

Re: Development Plan Amendment
Environmental Assessment
Kapolei Business Park

Dear Mr. Wanket:

In response to your request for comments, the Department of Business and Economic Development strongly supports the proposed development plan for Kapolei Business Park.

Sincerely,

Roger A. Ulveling

RAU:dq
November 9, 1989

Mr. Roger A. Ulveling
Director
State Department of Business and
Economic Development
P.O. Box 2359
Honolulu, Hawaii 96804

RE: Environmental Impact Statement Preparation Notice (EISP N) for
Proposed Kapolei Business-Industrial Park – Response to
Comments Received

Dear Mr. Ulveling:

Thank you very much for taking the time to review the above-referenced
EISP N, and for your expression of strong support for the proposed Kapolei
Business-Industrial Park project. We will continue to coordinate our
development with your office to ensure that you have the opportunity to
review any comments on the proposed development.

Sincerely,

WILLIAM E. WANKET
Mr. William E. Wanket, President
William E. Wanket, Inc.
Pacific Tower 660
1001 Bishop Street
Honolulu, Hawaii 96813

Dear Mr. Wanket:

SUBJECT: Proposal for Development Plan
Amendment/Environmental Assessment;
Kapolei Business Park; Ewa, Oahu, Hawaii
TMK: 9-1-14; por 2; 9-1-15: 1,13,16

Our review of the subject proposal in Ewa indicates that there is negligible impact on public schools in the area.

Thank you for the opportunity to comment.

Sincerely,

Charles T. Toguchi
Superintendent

CTT: jl

cc: Mr. E. Imai
Mr. E. Nakano
November 13, 1989

Mr. Charles T. Toguchi
Superintendent
State Department of Education
P.O. Box 2360
Honolulu, Hawaii 96804

RE: Environmental Impact Statement Preparation Notice (EISPAN) for Proposed Kapolei Business-Industrial Park – Response to Comments Received

Dear Mr. Toguchi:

Thank you very much for taking the time to review the above-referenced EISPAN. We will continue to coordinate our development with your office to ensure that you have the opportunity to comment on the proposed Kapolei Business-Industrial Park.

Sincerely,

WILLIAM E. WANKET
Mr. William E. Wanket, President
William E. Wanket, Inc.
1001 Bishop Street
Honolulu, Hawaii 96813

Dear Mr. Wanket:

We recognize that the comment period for this Environmental Assessment (EA) has elapsed, but wish to offer the following comments for the record. We further understand, thru verbal communication with the Office of Environmental Quality Control, that the subject of our hazardous waste concerns is due to be addressed in the upcoming Environmental Impact Statement (EIS) for this project.

Hazardous Waste

The EA mentions, in the Summary Section, page ii, a "landfill area containing industrial waste." The EA further mentions, in the Hazardous Environmental Impacts Section, an "industrial scrap metal" site. Clarification must be made to identify that both citations refer to the same site; or, are two different sites intended?

With respect to what the Department of Health (DOH) is aware of, we know of a hazardous wastepile, located approximately at the boundary of the proposed site, belonging to Hawaiian Western Steel (HWS), tenants of the Campbell Estate. This wastepile was created by the disposal of baghouse dust, hazardous waste products from HWS processing. This contaminated waste (heavy metals) was also mixed with non-hazardous slag material, creating a significant volume of "waste." This site has been under non-compliance follow-up actions by the Environmental Protection Agency, (EPA) and is currently undergoing agency negotiations related to acceptable corrective actions and environmental remedies. The timely resolution (both environmental and litigative) of this case is uncertain.

Therefore, the EA's claim to address (in the EIS) any mitigative (resolving) actions is questionable, because even the regulatory agencies involved (EPA and DOH) are not presently able to predict resolution in the foreseeable future.

Part of the pending concerns of this case, is that the DOH has not, to-date, been kept actively involved by EPA in their enforcement follow up actions. This inter-agency dialogue is now on-going. Until the DOH has been
adequately briefed on the environmental risks posed by this "wastepile - landfill," and the various alternatives for corrective action, we will continue to maintain a very cautious, very conservative, very protective posture on development in this proposed.

Wastewater Disposal

We have reviewed the subject project and find that there is insufficient capacity at Honolulu to handle the anticipated wastewater flows from the subject development and the use of private systems or individual wastewater systems is not consistent with the overall concept of the planning area.

The Department has recommended approval of the City's Section 301(h) secondary treatment request up to 25 mgd. Thereafter, the Department will require the City to treat all subsequent flows to secondary and consider effluent reuse.

It is therefore advised that the project proposed by authorized only on the basis of concurrent programming of public facilities to collect, treat, and properly dispose of the wastewater anticipated to be generated from this project. Concurrent programming should include but not be limited to completion of plans and the initiation of construction drawings with financing to proceed with construction at the earliest possible date.

Sincerely,

[Signature]

BRUCE S. ANDERSON, PH.D.
Deputy Director for
Environmental Health
December 12, 1989

Dr. Bruce S. Anderson
Deputy Director for Environmental Health
P.O. Box 3378
Honolulu, Hawaii 96801

RE: Environmental Impact Statement Preparation Notice (EISPN) for Proposed Kapolei Business-Industrial Park - Response to Comments Received

Dear Dr. Anderson:

Thank you very much for taking the time to review the above-referenced EISPN. Our responses to the comments offered are provided:

Hazardous Waste

Reference to a "landfill area containing industrial waste" in the EA Summary Section is the same area referred to in the Hazardous Environmental Impacts Section as an "industrial scrap metal" site. A map will be included in the DEIS identifying the location of the site and the tenant, which, as you correctly noted, is Hawaiian Western Steel (HWS).

We understand that HWS had proposed an "Interim Site Remediation Plan" prepared by Harding Lawson Associates that proposes to consolidate the contaminants by covering them with a permeable cap of native soil.

However, we agree with you that acceptable corrective actions and environmental remedies have not, as yet, been officially determined. This issue will be listed in the DEIS as an "Unresolved Issue."
Wastewater Disposal

The proposed Kapolei Business-Industrial Park, including the amendment area is intended to be served by an underground sewage collection system ultimately discharging to the Honolulu Wastewater Treatment Plant. In the event the development of the amendment area precedes the completion of the treatment plant expansion, a temporary treatment plant, if required, will comply with all government standards and regulations pertaining to private treatment facilities.

We will continue to coordinate our project with you to ensure that you have the opportunity for further review and additional comments.

Sincerely,

WILLIAM E. WANKET
November 7, 1989

William E. Wanket, Inc.
William E. Wanket, President
Pacific Tower 660
1801 Bishop Street
Honolulu, Hawaii 96813

Dear Mr. Wanket:

SUBJECT: EISPN for Proposed Kapolei Business-Industrial Park
Honouliuli, Ewa, O'ahu
TRK: 9-1-14: 2 (por) and 9-1-15: 1, 13, 16

Thank you for the opportunity to review this preparation notice.

In the Section on Historic and Archaeological Resources, we note with approval that a determination of present land conditions, assessment of condition of the extant archaeological sites, and review of past archaeological and palentological studies are included in your objectives. These objectives should result in a succinct overview of the Barbers Point Harbor Archaeological District, a site which has been determined eligible for the National Register of Historic Places, as your entire project is within the boundaries of this District.

Also, within the district are several paleontological and archaeological sites which should be addressed specifically and individually in the EIS. These are 80-12-9714, the Oahu Railway & Land Company Right-of-Way, which is listed on the National Register; 50-Oa-B6-22, the large sinkhole site which Campbell has fenced and excluded from the quarry operations; and the 8 acres on the northwest corner of Malekole and Hanua Roads, which has been proposed for an educational paleontological park.

In the case of 80-12-9714 and 50-Oa-B6-22, a preservation plan which addresses buffer zones, access, preservation measures, etc., should be presented in the EIS. In the case of the 8 acre paleontological park, it is not entirely clear from the EISPN whether Campbell Estate has yet made a commitment to pursue this proposal. If so, the specifics of the plan proposed to implement this commitment should be addressed in the EIS.

Sincerely,

DON HIBBARD, Director
Historic Preservation Program
November 8, 1989

Mr. Edward Y. Hirata
Director of Transportation
State Department of Transportation
869 Punchbowl Street
Honolulu, Hawaii 96813-5097

RE: Environmental Impact Statement Preparation Notice (EISPN)
for Proposed Kapolei Business-Industrial Park – Response to
Comments Received

Dear Mr. Hirata:

Thank you very much for taking the time to review the above-referenced
EISPN. We will continue to coordinate our development with your office,
and look forward to your review and comments on the forthcoming Draft
Environmental Impact Statement.

Sincerely,

WILLIAM E. WANKET
October 30, 1989

William E. Wanket, Inc.
William E. Wanket, President
Pacific Tower 660
1001 Bishop Street
Honolulu, Hawaii 96813

Dear Mr. Wanket:

Subject: EISPM For Kapolei Business - Industrial Park

We have no comments to offer except that the subject property, based on the maps contained in the subject report appears to be located within the State Land Use Agricultural District.

We suggest that you obtain a boundary interpretation from our office to clarify the location of the property with respect to the land use district boundaries prior to filing any petition for district boundary amendment for the project.

If you have any questions, please call me or my staff at 548-3039. Thank you for the opportunity to comment.

Sincerely,

ESTHER UEDA
Executive Officer

EU:to
November 25, 1989

Mr. Don Hibbard
Director Historic Preservation Program
Department of Land and Natural Resources
P.O. Box 621
Honolulu, Hawaii 96809

RE: Environmental Impact Statement Preparation Notice (EISP/N)
for Proposed Kapolei Business-Industrial – Response to
Comments Received

Dear Mr. Hibbard:

Thank you very much for taking the time and effort to review the above referenced EISP/N. Dr. Hallett Hamatt of Cultural Surveys Hawaii is in the process of finalizing an archaeological assessment for the proposed Kapolei Business-Industrial Park. All of your comments will be addressed in his report and incorporated in the Draft EIS, including those questions pertaining to Sites 80-12-9714 and 50-0A-B6-22.

We will continue to coordinate our project with you to ensure that you have the opportunity to provide any additional comments.

Sincerely,

WILLIAM E. WANKET
November 3, 1989

Mr. William E. Wanket
William E. Wanket, Inc.
Pacific Tower, Suite 660
1001 Bishop Street
Honolulu, Hawaii 96813

Dear Mr. Wanket:

Proposed Kapolei Business-Industrial Park
Ewa, Oahu

Please add our department to your list of agencies who wish to be consulted during the preparation of the environmental impact statement (EIS). We will reserve comments until after we have had the opportunity to review the draft EIS.

Very truly yours,

Edward Y. Hirata
Director of Transportation
STATE COMMENT LETTERS
AND
APPLICANT RESPONSES
Title: Kapolei Business-Industrial Park

Location: Ewa, Oahu

Proposing Agency/Applicant: The Estate of James Campbell

Accepting Authority/Approving Agency: C&C Dept of General Planning

Deadline for Comments: February 6, 1990

Date Sent/By: December 23, 1989

STATE AGENCIES

<table>
<thead>
<tr>
<th>Agency Name</th>
<th>No. Copies</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>OEOC, Director</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Dept. of Agriculture</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Dept. of Accounting and General Services</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Dept. of Defense</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Dept. of Education (a)*</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Dept. of Hawaiian Home Lands (a)*</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Dept. of Health</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Dept. of Land and Natural Resources</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>DLNR, State Historic Preservation Officer</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Dept. of Business and Economic Development</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>DBED Library</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Housing Finance &amp; Development Corporation</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Dept. of Transportation</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>State Archives</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>State Energy Office</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Office of State Planning</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>UNIVERSITY OF HAWAII</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Environmental Center</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Marine Programs (a)*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water Resources Research Center</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

FEDERAL

<table>
<thead>
<tr>
<th>Agency Name</th>
<th>No. Copies</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regional Div. USEPA Region TX</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Army-DAFE (Facilities Eng.-USASCH)</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Environmental Protection Agency (a)*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Navy</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Soil Conservation Service</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>U.S. Army Corps of Engineers</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>U.S. Coast Guard</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>U.S. Fish and Wildlife Service</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>U.S. Geological Survey (a)*</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Library Copy: 1
Total Received: 60
Total Distributed: 55
Copy of Distribution List Sent to: Dept of General Planning C&C and The Estate of James Campbell c/o William E. Wacket

File Copy: 2
Planner: 1

(a)* Copy desired only if project involves the agency's responsibilities.
| Honolulu Star-Bulletin | 1 |
| Honolulu Advertiser | 1 |
| Sun Press | 1 |
| Hawaii Tribune Herald (b)** | 1 |
| West Hawaii Today - Kona (b)** | 1 |
| The Garden Island Newspaper - Kauai (b)** | 1 |
| Maui News (b)** | 1 |
| Ka Molokai (b)** | 1 |

**CITY AND COUNTY OF HONOLULU (b)**

| Board of Water Supply | 1 |
| Building Dept. | 1 |
| Dept. of Housing and Community Development | 1 |
| Dept. of General Planning | 1 |
| Dept. of Land Utilization | 1 |
| Dept. of Parks and Recreation | 1 |
| Dept. of Public Works | 1 |
| Dept. of Transportation Services | 1 |
| Fire Dept. | 1 |
| Municipal Reference and Records Center (Oahu only) | 1 |
| Police Dept. | 1 |

**COUNTY OF HAWAI'I (b)**

| Planning Dept. | 1 |
| Dept. of Parks and Recreation | 1 |
| Dept. of Public Works | 1 |
| Dept. of Research and Development | 1 |
| Dept. of Water Supply | 1 |
| University of Hawaii - Hilo Campus Library | 1 |

**COUNTY OF MAUI (b)**

| Planning Dept. | 1 |
| Dept. of Parks and Recreation | 1 |
| Dept. of Public Works | 1 |
| Dept. of Water Supply | 1 |
| Economic Development Agency | 1 |
| Maui Community College Library | 1 |

**COUNTY OF KAUAI (b)**

| Planning Dept. | 1 |
| Dept. of Public Works | 1 |
| Dept. of Water Supply | 1 |
| Kauai Community College Library | 1 |

**NON-GOVERNMENTAL AGENCIES**

| American Lung Association | 1 |
| Hawaiian Electric Company | 1 |
| Office of Hawaiian Affairs | 1 |

**LIBRARIES**

| U.H. Hamilton Library, Hawaiian Collection | 1 |
| Legislative Reference Bureau | 1 |

**(b)** Copy desired only if project is in respective county.
1) Wilber Smith and Associates "HALI 2000 Alternatives Analysis Study for the Oahu Long-Range Transportation Plan Update" June 1984 (Prepared for the Oahu Metropolitan Planning Organization)
(1) Wilber Smith and Associates "HALI 2000 Alternatives Analysis Study for the Oahu Long-Range Transportation Plan Update" June 1984 (Prepared for the Oahu Metropolitan Planning Organization)
<table>
<thead>
<tr>
<th>LIBRARIES</th>
<th>NO. COPIES</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>State Main Library</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>REGIONALS:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kaimuki Regional Library</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Kaneohe Regional Library</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Pearl City Regional Library</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Kalo Regional Library</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Vailuku Regional Library</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Ihue Regional Library</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>OAHU:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alea Library</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aliana Library</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ewa Beach Community-School Library</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wahiawa Library</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kahuku Community-School Library</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kailua Library</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kalihi-Palama Library</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lilili Library</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Waimano Library</td>
<td></td>
<td></td>
</tr>
<tr>
<td>McCulli-Molale Library</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mililani Library</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Waiula Library</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Waikane Library</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wailuku-Kapahulu Library</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Waimanalo Community-School Library</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Waipahu Library</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HAWAII</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bond Memorial (Kohala) Library</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Holualoa Library</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Honokaa Library</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kailua-Kona Library</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Keaau Community-School Library</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kealakekua Library</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Laupahoehoe Community-School Library</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mountain View Community-School Library</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pahala Community-School Library</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pahoa Community-School Library</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thelma Parker Memorial Library/Waimea Area Library</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MAUI</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kahului Library</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lahaina Library</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Makawao Library</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MOLOKAI</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Molokai Library</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LANAI</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lanai Community-School Library</td>
<td></td>
<td></td>
</tr>
<tr>
<td>KAUAI</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hanapepe Library</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kapaa Library</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Koloa Community-School Library</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Waimea Library</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
February 6, 1990

Mr. Benjamin B. Lee
Chief Planning Officer
Department of General Planning
City and County of Honolulu
650 South King Street
Honolulu, Hawaii 96813

Dear Mr. Lee:

Subject: Draft Environmental Impact Statement (DEIS) for Kapolei Business-Industrial Park
Proposed Amendment to the Eva Development Plan
Land Use Map
Agriculture to Industrial and Commercial
The Estate of James B. Campbell
TMK: 9-1-14: por. 2
9-1-15: 1, 13, 16 Eva, Oahu
Area: approximately 552.1 acres

The Department of Agriculture has reviewed the subject document and offers the following comments.

According to the DEIS, the applicant is seeking to construct an industrial/commercial park to the east of the Barbers Point Deep Draft Harbor. One hundred and forty-five acres of the site is leased to Oahu Sugar Company (OSC) and is in sugarcane cultivation. Our information indicates that the affected OSC Field 004 is drip-irrigated.

References to the Agricultural Lands of Importance to the State of Hawaii (ALISH) system, the Land Study Bureau's Detailed Land Classification for Oahu, and the Soil Conservation Service Soil Survey for Oahu are correct.

SPECIFIC COMMENTS

Impact on Oahu Sugar Company

Page 79 of the DEIS indicates that the short- and intermediate-term effects of developing the subject property will be limited because the affected lands are: (1) of inferior
quality, and (2) on the outskirts of the plantation, resulting in a more compact plantation. The future of OSC "is uncertain given the outlook for flat or declining sugar prices and costs which increase with inflation," and "economic incentives may not favor renewal of the major leases" (DEIS, pages 79-80). From the information provided in Appendix J ("Proposed Kapolei Business-Industrial Park: Impact on Agriculture," Decision Analysts Hawaii, Inc.; November, 1989), the subject project, and the other projects affecting OSC operations that are planned or have received state and/or county zoning approvals, will eventually have a very significant adverse impact on OSC.

The projected cumulative intermediate (to the year 1995) impact of multiple project development in Central Oahu and Ewa of about 2,000 acres (Appendix J, page 10) will not diminish the full impact of the eventual urbanization of sugarcane cultivated lands. The intermediate impact will reduce OSC acreage under cultivation to 11,490, which is perilously close to the minimum acreage needed for the plantation to remain economically viable in a single mill configuration (estimated to be about 10,669 acres at 14.06 tons of sugar per acre per year, based on 1987 yield figures, or 11,284 acres based on 1988 yield figures).

In the long run, the significant impact on OSC will be that cultivable acreage available to OSC after full development of the planned and proposed projects (about 7,700 acres) will be far below the minimum acreage needed to remain economically viable in a single-mill operation and much less than the acreage required for the present double-mill configuration. Annual sugar yields (expressed in tons of sugar per acre or TSA) would have to increase by about 47 percent over the 1988 OSC average yield (13.16 TSA) to about 19.4 TSA for the 7,700 acre to produce the 67,500 tons of raw sugar required of a single-mill operation (based on the harvestable acreage assumption of Appendix J, Table 3).

In either case, OSC will be forced to modify its operations and increase the yields from its remaining fields to forestall the inevitable situation when the company finds it no longer economic to remain in operation.

Consistency with State Plans

From the above discussion, it is evident that the project is inconsistent with the objectives, policies and guidelines relating to agriculture in the Hawaii State Plan and the State Agriculture Functional Plan (June, 1985) (Appendix J, Table 6, pages 25-26).
Impact on Diversified Agriculture

The DEIS states that "it is extremely doubtful that the project would adversely affect the growth of diversified agriculture in Hawaii" (page 81). This conclusion is based on the supposed relative abundance of arable lands formerly in sugarcane and pineapple cultivation, the supposed availability of these lands for profitable replacement crops and the small amount of lands and water required to grow diversified crops.

Appendix J states that the Land Evaluation and Site Assessment (LESA) Commission projections for prime agricultural lands needed for diversified agriculture are "high in that diversified agriculture is growing more slowly than LESA Commission projections" (page 20) and that the total additional acreage needed to accommodate diversified agriculture to the year 2000 is "probably far less than 2,000 acres" for the State as compared to the LESA Commission projections. The LESA Commission purposefully took a more optimistic and broad view of the future of diversified agriculture in Hawaii than does the DEIS. In the determination and protection of "important agricultural lands," it is the State's duty to assure the availability of agriculturally suitable lands. Therefore, it is appropriate that the State take a conservative, long-range view and maintain what appears to be a surplus of productive lands as compared to the DEIS' findings. Incremental losses of a resource like arable lands, if left uncontrolled, will have a devastating and irreversible cumulative effect on the viability of agriculture, and in particular, Oahu Sugar Company. Once agricultural lands are urbanized there is no return. This cannot be overemphasized.

To summarize, we are convinced that the agricultural resources of the area and that of OSC in particular will be adversely affected by the proposed development. Therefore, using the project site for the proposed use would be inconsistent with applicable objectives, policies, priority guidelines, and implementing actions of the Hawaii State Plan (as amended) and the adopted State Agriculture Functional Plan (1985) as they relate to sugarcane and diversified agriculture.

CONCLUSION

The Department of Agriculture strongly recommends that both the subject project's immediate impacts and its contribution to the long-term cumulative impact of ongoing, planned, and proposed urban development adversely affecting the Oahu Sugar Company be more thoroughly discussed in the Final EIS. We hereby request a copy of the Final EIS upon its availability.
Thank you for the opportunity to comment.

YUKIO KITAGAWA
Chairperson, Board of Agriculture

cc: William E. Wanket, Inc.
Office of State Planning (attention: Land Use Division)
Office of Environmental Quality Control
February 16, 1990

Mr. Yukio Kitagawa  
Chairperson  
Board of Agriculture  
1428 South King Street  
Honolulu, Hawaii 96814-2512

RE: Draft Environmental Impact Statement (DEIS) for Proposed Kapolei Business-Industrial Park - Response to Comments Received

Dear Mr. Kitagawa:

Thank you very much for the copy of your letter of February 6, 1990 to the Department of General Planning regarding the referenced project. We appreciate your efforts in reviewing the DEIS, and offer the following information in response to your comments.

COMMENT - Page 2, Paragraph 1:

"...the subject project, and the other projects affecting OSC operations that are planned or have received State and/or County zoning approvals will eventually have a very significant adverse impact on OSC."

Response:

If all planned and proposed projects were to be approved and built (which is not certain), the cumulative impact on OSC would indeed be significant. However, the major impacts will result from projects other than the Kapolei Business-Industrial Park. As discussed in the DEIS, Kapolei Business-Industrial Park is consistent with the County's policy of developing Ewa as the secondary urban center. Kapolei Business-Industrial Park conforms with the preferred sequence for contracting the plantation, which is from the periphery of the plantation inward. Lands at the site of the proposed development are a long trucking distance from the mills, soils are inferior to those of inland fields, and yields are generally lower than the average yields of the plantation.
In the longer term, the site for the proposed development eventually will become isolated from the rest of the plantation as a result of developments which have already been approved, including development of the State's Villages of Kapolei. Consequently, if the project area were to remain part of OSCo, the fields would become "remnant" parts of the plantation and would be fallowed.

COMMENT - Page 2, Paragraph 2:

"The intermediate impact [of all planned and proposed projects, assuming all are approved and built] will reduce OSC acreage under cultivation to 11,490 acres, which is perilously close to the minimum acreage needed for the plantation to remain economically viable in a single mill configuration (estimated to be about 10,669 acres at 14.06 tons of sugar per year, based on 1987 yield figures, or 11,284 acres based on 1988 yield figures]."

Response:

Typically, yields increase gradually over time, although some years may exhibit a drop in yields. By 1995 when the leases expire (the term for the intermediate impact) yields are expected to exceed 14.5 tons per acre. Corresponding acreage requirements for full production under a one-mill plantation would be less than 10,400 acres.

COMMENT - Page 2, Paragraphs 3 & 4:

"In the long run, the significant impact on OSC will be that cultivable acreage available to OSC after full development of the planned and proposed projects (about 7,700 acres) will be far below the minimum acreage needed to remain economically viable in a single-mill operation and much less than the acreage required for the present double-mill configuration."

"...OSC will be forced to modify its operations and increase the yields from its remaining fields to forestall the inevitable situation when the company finds it no longer economic to remain in operation."

Response

The comments contained in paragraphs 3 and 4 of page 2 assume that (1) all planned and proposed projects affecting OSCo acreage will be approved and built; (2) sugar prices will remain sufficiently high to justify continued sugar operations at OSCo, with high sugar price-supports surviving (a) competition from newly approved sweeteners; (b) negotiations on the General Agreement on Tariffs and Trade wherein the U.S. limitations on sugar imports have been found to violate international trade rules, and; (3) major leases for OSCo lands will be renewed, even though economic incentives appear unfavorable to the renewal of some of these leases. Under these improbable conditions, then the urbanization of OSCo lands becomes an increasingly important issue, with the survival of the plantation becoming progressively more difficult. At full development of all planned and proposed projects (if they are approved and built), OSCo would retain about 7,700 acres; Pioneer Mill Company, Ltd. has been able to survive with even less acreage.

It should also be noted that the large reductions in acreage will be from developments other than Kapolei Business-Industrial Park.
COMMENT - Page 2, Paragraph 5:

"...it is evident that the project [Kapolei Business-Industrial] is inconsistent with the objectives, policies and guidelines relating to plantation agriculture in the Hawaii State Plan and the State Agricultural Functional Plan..."

Response

As discussed in the DEIS, Appendix J, Kapolei Business-Industrial Park (1) is not expected to adversely affect the economic viability of OSCo before the major leases expire in the mid-1990s; (2) conforms to the preferred sequence for contracting the plantation; and (3) would not adversely affect the economic viability of OSCo in the longer term since the property will become an isolated remnant of the plantation as a result of other development projects. Thus, Kapolei Business-Industrial Park is consistent with the major thrust of the plantation agriculture portion of the Hawaii State Plan, and the State Agriculture Functional Plan, which calls for preserving the economic viability of plantation agriculture.

COMMENT: Page 3, Paragraphs 1 & 2:

As noted by the DOA, the DEIS states that "it is extremely doubtful that the project would adversely affect the growth of diversified agricultural in Hawaii." According to the DOA, "This conclusion is based on the supposed relative abundance of arable lands formerly in sugarcane and pineapple cultivation, the supposed availability of these lands for profitable replacement crops, and the supposed very small amount of lands and water required to grow diversified crops."

Regarding the amount of land required for the growth of diversified agriculture, the DOA argues that the optimistic Land Evaluation and Site Assessment (LESA) Commission projections should be used rather than more realistic projections.

Response

In addition to most of the 100,000 acres that have been or will soon be released from sugar and pineapple production since 1968, a portion of the land now in sugarcane is being held awaiting the discovery of profitable replacement activities; this additional land forms part of the supply of prime agricultural land which is available to profitable diversified-agriculture crops, and amounts to over 60,000 acres.

The conclusion in the DEIS that a very small amount of prime-agriculture land and water is required to accommodate the growth of diversified agriculture crops is based on the LESA projections, and not on the more realistic projections discussed in the report. Based on LESA analysis, less than 9,000 acres of prime agricultural land are required per 12-year period. However, land is being released from plantation agriculture at a rate which far exceeds the demands for diversified agriculture. Furthermore a rapid growth of diversified agriculture would accelerate the release of land from sugar operations since most plantations are searching for profitable replacement crops.
COMMENT: Page 3, Paragraph 2:

"The State should maintain a surplus of [potentially] productive agricultural lands. "Incremental losses of a resource like arable lands, if left uncontrolled, will have a devastating and irreversible cumulative effect on the viability of agriculture, and in particular, Cahu Sugar Company."

Response

As discussed in the DEIS, a very large surplus of prime agricultural land exists and, given the poor economic health of the sugar industry, this surplus is expected to grow. The 145 acres of agricultural land within the area proposed for Kapolei Business-Industrial Park is far too little acreage to adversely affect this large and growing surplus of prime agricultural land.

Again, thank you for taking the time to review and provide comments to the DEIS. The Final EIS will be expanded to reflect these comments. For your information, your letter, together with this response, will be published in the Final EIS.

Sincerely,

WILLIAM E. WANKET

cc: Benjamin B. Lee, Chief Planning Officer
February 6, 1990

Mr. Benjamin B. Lee  
Chief Planning Officer  
Department of General Planning  
City and County of Honolulu  
650 South King Street  
Honolulu, Hawaii 96813

Dear Mr. Lee:  

Subject: Draft Environmental Impact Statement for Kapolei  
Business-Industrial Park

The Energy Division has received the subject Draft Supplemental  
Environmental Impact Statement (DEIS) and has the following comments:

We note that in Chapter V, page 91, the DEIS mentions types of energy  
conservation measures or renewable energy sources that the project will  
consider. While such references indicate an intent to consider energy  
conservation issues in the design and construction of the project, they do not  
signal a commitment to design and construct an energy-efficient project. In  
the place of the tentative language used in the DEIS, we would like to see  
language that commits the developers to the use of energy conservation design  
and technologies to help meet the project's energy requirements.

We would like to recommend that the developer commit to adopting "energy  
efficiency design guidelines" for this project. We are enclosing, for  
consideration, guidelines which the Energy Division prepared for the Housing  
Finance and Development Corporation (HFDC) and which were included in HFDC's  
recent request for proposals for increments two and three of the Villages of  
Kapolei.

We are also enclosing a copy of recent correspondence we received from  
DHH Inc., regarding our comments on a DEIS for the Waikiki landmark. We would  
recommend specific language similar to that in the DHH letter for inclusion in  
the final EIS on the Kapolei project. In addition, we would recommend  
separate metering for each of the business and industrial units, since  
separate metering provides an incentive for energy conservation to the unit  
occupants.
Mr. Benjamin B. Lee
Page 2
February 6, 1990

Thanks for this opportunity to comment. I hope these comments will be useful to you.

Sincerely,

Tony O'Brien

cc: Maurice H. Kaya
Energy Program Administrator

MHK/PE: dki
Enclosures

cc: Estate of James Campbell
Dr. Marvin T. Miura
roof rafters or top side of the ceiling joists per manufacturer's recommendations.

2.5 Use light colored finishes on roof and wall to reflect sunlight.

3.0 Mechanical Equipment and Systems

3.1 Consider use of heat pump water heaters.

3.2 Consider use of solar water heater or provide for future installation by pre-plumbing and running power and control wiring.

3.3 Utilize the most efficient refrigerators, clothes dryers, and dishwashers.

3.4 Install ceiling fans or provide for future installation.

3.5 Use time switches to cut off electricity when not needed to high-usage applications or equipment such as electric water heater.

3.6 Install fluorescent lights with high efficiency ballasts.

3.7 Use low water consumption waterclosets.

3.8 Install flow restrictors on showers and other water uses which can have high flow rates.
DESIGN GUIDELINES - ADDENDUM NO. 1

ENERGY EFFICIENCY DESIGN GUIDELINES

To minimize the life cycle energy use and life cycle cost of the project while maintaining the project development objectives of cost effectiveness, health, safety, security and aesthetics, the following guidelines should be considered and, where applicable, incorporated into the project plans.

1.0 Site Planning and Landscaping

1.1 Orient streets to provide an east/west orientation for the long dimension of the houses to minimize heat gains in the morning and afternoon.

1.2 Incorporate pedestrian walkways and bikeways to encourage walking and bicycling between home, school, parks and commercial areas.

1.3 Select and place landscape materials on the site to provide shading to minimize heat gains in the morning and afternoon.

1.4 Minimize exterior paved surfaces that are not shaded by trees, awnings, trellises, roofing or house.

1.5 Provide for enclosed yard areas where clotheslines could be utilized.

1.6 Incorporate drip irrigation where appropriate, and automate irrigation system to conserve water.

1.7 Select drought-tolerant landscape materials where appropriate to reduce the need for water and energy consumption associated with landscape maintenance.

2.0 Building Design

2.1 Use operable windows to allow cross ventilation in every room, and orient openings toward prevailing winds.

2.2 Utilize eaves (minimum 30°), louvers, trellises, or shade screen to shade windows, especially on west, south and east sides.

2.3 Ventilate attic with devices such as louvers at or near the roof ridge to reduce attic heat buildup and resultant heat transfer to living areas.

2.4 Install a radiant barrier (reflective foil-faced Kraft paper material or similar product) in the attic to reduce heat gain into the house attic. Typically installed at the underside of the
January 11, 1990

Mr. Maurice H. Kaya  
Energy Program Administrator  
Department of Business  
and Economic Development  
Energy Division  
State of Hawaii  
335 Merchant Street, Room 310  
Honolulu, Hawaii 96813  

Dear Mr. Kaya:  

Subject: Revised Draft Environmental Impact Statement  
for Waikiki Landmark  

Thank you for your letter commenting on the Revised Draft Environmental Impact Statement (Revised dEIS) for the Waikiki Landmark.  

The proposed Waikiki Landmark Development has an estimated electrical energy consumption of 500,000 kwh/month or 1,428.6 kwh/day. The Waikiki Landmark development will incorporate the most recent energy saving technology so as to minimize the cost of energy to occupants of the commercial space and the residential units. The following features will be provided:  

1) Each fan coil air conditioning unit in each unit will be separately controlled so that the occupant has the choice of cooling different areas in his/her unit at alternative times of the day.  

2) A heat pump will be used to heat the building’s hot water system. Studies have shown that this is the most efficient method of heating the hot water.  

3) The condenser heat from the central chilled water system will be recovered by the heat pump to heat the building’s hot water.  

4) High efficiency motors will be used on most of the motor driven equipment.  

5) High efficiency chillers will be used for the residential towers.  

6) A variable speed secondary chilled water pumping system will be used for the residential fan coil units. 
Electrical energy conservation measures which will be provided as part of the proposed development include:

1) Light sources to be used primarily are fluorescent and H.I.D. (High Pressure Sodium and Metal Halide). Compact fluorescent lamps will be used in place of incandescent lamps, with the exception of low-voltage accent lighting at water features, etc. A 13-watt compact fluorescent replaces a 60-watt incandescent with the same light output at a savings of 47 watts/lamp. This reduction in watts also lowers the air conditioning load.

2) Ballasts for all fluorescent lamps will be energy-saving type, or premium high power factor type for applications where energy-saving type are not manufactured. Energy-saving ballasts (ESB’s) use 37 percent less energy than standard ballasts for the same light output. ESB’s also run approximately 10 degrees cooler than standard ballasts, reducing the air conditioning load.

3) Reflectors for light fixtures are highly specular and contribute to overall fixture efficiency, enabling use of lower wattages and fewer fixtures to achieve desired lighting levels.

4) Secondary power factor correction is provided to bring the building power factor to 90 percent or greater.

Applicable sections of the State Plan’s objectives, policies and guidelines for energy use and the State Energy Functional Plan will be examined and included in the Final EIS for the Waikiki Landmark.

Your comment letter is appreciated and will be included in the Final Environmental Impact Statement. If you should have any additional comments regarding these measures please feel free to contact me or Eric Parker of my staff.

Sincerely,

DHM inc.

Duk Hee Murabayashi (Mrs.)
President

cc: Dr. Marvin Miura, OEQC
Mr. Bennett Mark, DLU
Mr. Tony Tjan, Bel-Landmark, Inc.
April 4, 1990

Mr. Maurice H. Kaya
Energy Program Administrator
Energy Division
Department of Business and Economic Development
335 Merchant Street
Room 110
Honolulu, Hawaii 96813

RE: Draft Environmental Impact Statement (DEIS) for Proposed Kapolei Business-Industrial Park - Response to Comments Received

Dear Mr. Kaya:

We appreciate receiving a copy of the "Energy Efficiency Design Guidelines" developed by the Energy Division for the Housing Finance and Development Corporation for use in its housing programs. We also note with interest the energy saving technology that will be used by a specific development project in Waikiki, the Waikiki Landmark. However, in the Kapolei Business-Industrial Park proposal, no specific development project has been determined for the area. Instead, the "Park" is likely to accommodate several hundred different types of industries, all having special needs to meet their operational requirements.

Campbell Estate's sensitivity to the environment of industrial land has been demonstrated by the James Campbell Industrial Park (JCIP). Campbell Estate intends to maintain and improve that standard at Kapolei Business-Industrial Park. For the past 17 years, JCIP has issued annual Landscape Awards for overall design and landscaping (both of which are important considerations in minimizing heat gains). Also, for the most part, industries in the JCIP are on separate meters.

Energy saving devices are usually cost effective and most new businesses can be expected to take advantage of these energy conservation measures. In the development of Kapolei Business-Industrial Park, Campbell Estate will be reviewing and updating its current Covenants, Conditions and
Restrictions (CC&Rs), and in this process, will be preparing "energy efficiency design guidelines", which will be shared with you for review and input.

Again, thank you for your comments. For your information, your letter together with this response will be included in the Final EIS.

Sincerely,

WILLIAM E. WANKET

cc: Benjamin B. Lee, Chief Planning Officer
MEMORANDUM

TO: Mr. Benjamin B. Lee, Director
    Department of General Planning

FROM: Joseph K. Conant

SUBJECT: Draft Environmental Impact Statement for the Proposed Kapolei Business-Industrial Park

Thank you for the opportunity to review the subject draft EIS. We have no housing-related comments to offer.

cc: /William E. Wanket, Inc.
    Dr. Marvin T. Miura, DEQC
February 15, 1990

Mr. Joseph K. Conant
Executive Director
State of Hawaii
Department of Budget and Finance
Housing Finance and Development Corporation
Seven Waterfront Plaza, Suite 300
500 Ala Moana Boulevard
Honolulu, Hawaii 96813

RE: Draft Environmental Impact Statement (DEIS) for Proposed Kapolei Business-Industrial Park - Response to Comments Received

Dear Mr. Conant:

Thank you very much for the copy of your memorandum of February 6, 1990 to the Department of General Planning stating that you have no housing related comments to provide. We appreciate your efforts in reviewing the above referenced DEIS.

For your information, your letter, together with this response, will be published in the Final EIS.

Sincerely,

WILLIAM E. WANKET

cc: Benjamin B. Lee, Chief Planning Officer
January 30, 1990

Engineering Office

Department of General Planning
City and County of Honolulu
550 South King Street, 8th Floor
Honolulu, Hawaii 96813

Gentlemen:

Draft Environmental Impact Statement for the proposed Kapolei Business-Industrial Park

Thank you for the opportunity to review the subject document. We find that the proposed Kapolei Business-Industrial Park will not have a serious impact on our plans for the future in the Ewa area.

Sincerely,

Jerry M. Matsuda
Lieutenant Colonel
Hawaii Air National Guard
Contracting and Engineering Officer

cc: William E. Wanket, Inc.
OEQC
February 5, 1990

Jerry M. Matsuda  
Lieutenant Colonel  
Hawaii Air National Guard  
Contracting and Engineering Officer  
Department of Defense  
Office of the Adjutant General  
3943 Diamond Head Road  
Honolulu, Hawaii 96816-4495

RE: Draft Environmental Impact Statement (DEIS) for Proposed 
Kapolei Business-Industrial Park - Response to Comments 
Received

Dear Lieutenant Colonel Matsuda:

Thank you very much for the copy of your letter of January 30, 1990 to the Department of General Planning regarding the referenced project. We appreciate your efforts in reviewing the DEIS, and we are pleased that the project will not have a serious impact on your plans for the area.

For your information, your letter, together with this response, will be published in the Final EIS.

Sincerely,

WILLIAM E. WANKET

cc: Benjamin B. Lee, Chief Planning Officer
February 1, 1990

Mr. William E. Wanket
Pacific Tower 660
1001 Bishop Street
Honolulu, Hawaii 96813

Dear Mr. Wanket,

It was brought to our attention that in a Draft Environmental Impact Statement, *Kanolei Business-Industrial Park, Ewa, Oahu*, five hundred fifty two acres of land were designated to be rezoned for eventual industrial and commercial use by Campbell Estates. Within this area is an eight acre parcel which we strongly feel should not be developed commercially. It is located in the northwest corner of the intersection of Malakole Road and the "Powerline Road."

As resource teachers in the Leeward District, we have visited and participated in hands-on activities in digging and identifying bones of prehistoric birds and other animals in the sinkholes. There was a wealth of information learned during the session. Our students should also be given the opportunity to acquire such stimulating experiences in the future. Awareness and appreciation of our unique environment in the Leeward District and in Hawaii would certainly be enhanced.

Therefore, this small remaining parcel of land (eight acres) should not be lost to development but preserved for its scientific and educational value.

Mary Ann Kobayashi, Science

Liane Kim, Science/Math

Fay Zenigami, Math

Judith Higa, Language Arts/GT Program

Claire Okazaki, Computer

Morris Umene, Art

Nicolette Pestana, Art

AN AFFIRMATIVE ACTION AND EQUAL OPPORTUNITY EMPLOYER
March 20, 1990

WILLIAM
E.
WANKET
INC.
Land Use Consultant

Ms Mary Ann Kobayashi, Science
Ms Liane Kim, Science/Math
Ms Fay Zenigami, Math
Ms Judith Higa, Language Arts/GT Program
Ms Claire Okazaki, Computer
Ms Morris Ueno, Art
Ms Nicolette Pestana, Art
Ms Kaylene Yee, Educational Specialist
Department of Education - Leeward District
Office of District Superintendent
94-366 Pupupani Street
Waipahu, Hawaii 96797

RE: Draft Environmental Impact Statement (DEIS) for the Proposed
Ke polei Business-Industrial Park - Response to Comments
Received

To Whom It May Concern:

Thank you very much for your letter of February 1, 1990, expressing
support for the preservation of the Malakole Sinkhole Area. In response,
we offer the following information.

In consideration of its acknowledged archaeological importance, Campbell
Estate will install a fence enclosing the Malakole Sinkhole area, similar
to the present enclosure around Sinkhole B6-22. This enclosure will enable
the site to be accessible for future research, as well as site visitations
by the archaeological community and interested segments of the public,
while protecting the resources from vandalism and/or destruction from
unauthorized entry.

Furthermore, the Estate will explore the possibility of securing the
sinkhole area for a period of five (5) years to allow study and removal of
artifacts, or for the site to be acquired by qualified parties. In this
connection, we attach for your information a copy of the Honolulu City
Council’s Resolution 88-476 (adopted January 11, 1989) requesting the Hawaii
State Legislature to allocate funds to the State Department of Land and
Natural Resources (DLNR)...to acquire land for an Archaeological Park
containing representative samples of sinkholes.

Pacific Tower
Suite 860
1101 Bishop Street
Honolulu, HI 96813
Phone
(808) 533-4937
FAX 521-5410
Again, thank you very much for taking the time to review and provide comments to the DEIS. For your information, your letter, together with this response, will be published in the Final EIS.

Sincerely,

WILLIAM E. WANKET

cc: Mr. Benjamin B. Lee, Chief Planning Officer

Encl (1)
RESOLUTION

REQUESTING THE HAWAII STATE LEGISLATURE TO ALLOCATE FUNDS TO THE DEPARTMENT OF LAND AND NATURAL RESOURCES TO CONDUCT ARCHEOLOGICAL RESEARCH ON OAHU'S SINK HOLES TO DETERMINE THEIR VALUE AS HISTORICAL AND ARCHEOLOGICAL RESOURCES AND TO ACQUIRE LAND FOR AN ARCHEOLOGICAL PARK CONTAINING REPRESENTATIVE SAMPLES OF SINK HOLES.

WHEREAS, under Chapter 6E of the Hawaii Revised Statutes, it is expressly stated that the State's public policy is "to provide leadership in preserving, restoring and maintaining historic and cultural property, to ensure the administration of such historic and cultural property in a spirit of stewardship and trusteeship for future generations and to conduct activities, plans, and programs in a manner consistent with the preservation and enhancement of historic and cultural property"; and

WHEREAS, the State Department of Land and Natural Resources has been statutorily charged with the responsibility of establishing a comprehensive historic preservation program which includes historic and archeological research such as surveys, excavations, scientific recordings, interpretations and publications on the State's historical and cultural resources; and

WHEREAS, the State Department of Land and Natural Resources has been given the authority to establish new parks by acquisition of property in the name of the State, as the department may deem necessary for the development of the State park system; and

WHEREAS, it has been recently brought to the City Council's attention that there are sink holes located on the Ewa plain, in Waianae and on various private and public properties on the Island of Oahu which may contain objects of historical, botanical or archeological value or interest; and

WHEREAS, to carry out the State's public policy commitment, the Council believes that these sink holes should be identified and studied to determine the need of possibly purchasing these sink holes to preserve the historical and archeological knowledge that they may contain for the people of Hawaii; and

WHEREAS, the State Department of Land and Natural Resources has communicated to the City Council that the Department is concerned with developing a plan for the protection of sink holes and that, given the rate of destruction of such historic sites by development, they would support acquisition of an area containing sink holes for purposes of active preservation; now, therefore,
RESOLUTION

BE IT RESOLVED by the Council of the City and County of Honolulu that this body request the Hawaii State Legislature to allocate funds to the State Department of Land and Natural Resources to conduct research on identifying the sink holes on Oahu that contain objects of historical, botanical or archeological value; and

BE IT FURTHER RESOLVED that the Council request the Hawaii State Legislature to allocate funds to the Department of Land and Natural Resources for development of an archeological park which contains representative samples of sink holes; and

BE IT FINALLY RESOLVED that the Clerk be, and he is hereby, directed to transmit a copy of this Resolution to the President of the Senate and the Speaker of the House of Representatives of the Hawaii State Legislature and to the Chairman of the Board of Land and Natural Resources.

DATE OF INTRODUCTION:

NOV 2 9 1988
Honolulu, Hawaii

Councilmembers

(OGS/112888/pn)

CITY COUNCIL
CITY AND COUNTY OF HONOLULU
HONOLULU, HAWAII

I hereby certify that the foregoing RESOLUTION was adopted by the COUNCIL OF THE CITY AND COUNTY OF HONOLULU on the date and by the vote indicated to the right.

ATTEST:

RAYMOND K. PUA
CITY CLERK

ARNOLD MORGADO, JR.
CHAIR AND PRESIDING OFFICER

Dated JAN 1 1 1989

ADPTED
MEETING HELD

JAN 1 1 1989

AYE NO ABST

ARASE

DHONTO

DES

FELIX

HALL

KAMAMU

MERE

MANO

MORGADO

Resolution No. 88-478

Reference:

Report No.: 
MEMORANDUM

To: Benjamin B. Lee  
Chief Planning Officer  
Department of General Planning  
City & County of Honolulu

From: Deputy Director for Environmental Health

Subject: Draft Environmental Impact Statement  
Kapolei Business - Industrial Park  
Ewa, Oahu  
TMK: 9-1-14: 2 (por.), 9-1-15: 1, 13, 16 (552.1 acres)

March 19, 1990

Thank you for the opportunity to review and comment on the draft EIS. We have the following comments:

Wastewater Disposal

We have reviewed the subject statement and concur that the wastewater generated from the development must be treated at Honolulu STP. The treatment facility is rapidly reaching its design capacity, and the City has planned to expand the plant. Non-availability of treatment capacity is not justification for use of any private treatment works.

The project should therefore proceed only on the basis that wastewater will be treated at the Honolulu WWTP.

Drinking Water

1. It is our understanding that the Kapolei Business-Industrial Park will require an average additional 1.32 million gallons per day (mgd) of potable water and 3.14 mgd of non-potable water. Water system improvements will be coordinated by the Ewa Plain Water Development Corporation. Potable water for the proposed development is intended to be provided by the Honolulu Wastewater Division.

2. The Department of Health, through Chapter 20, Title 11, Administrative Rules, is vested with the responsibility to approve all new sources of potable water serving public water systems. Section 11-20-29 of Chapter 20 requires such sources to be approved by the Director of Health prior to their serving of potable water. Section 29 approval is based primarily upon the satisfactory submission of an engineering report which addresses all concerns stated in the section.

3. We strongly recommend that the potable and non-potable water systems be kept strictly separate in order to eliminate the possibility of cross-connecting the two systems. In addition, all non-potable spigots should be clearly labeled in order to prevent the inadvertent consumption of non-potable water.

BRUCE S. ANDERSON, PH.D.
April 11, 1990

Mr. Bruce S. Anderson, Ph.D.
Deputy Director
Department of Health
P.O. Box 3378
Honolulu, Hawaii 96801

RE: Draft Environmental Impact Statement (DEIS) for Proposed
Kapolei Business-Industrial Park – Response to Comments
Received

Dear Mr. Anderson:

Thank you very much for the copy of your letter dated March 19, 1990 to
the Department of General Planning regarding the above-referenced project.
The following information is offered in response to your comments:

Wastewater

Engineering Concepts, Inc.; the project engineers, have been in contact
with the Department of Health regarding the private sewage treatment plant
issue. Previous meetings with the Wastewater Branch of DOH resulted in
the understanding that a temporary private treatment plant would be allowed
until the Honolulu Wastewater Treatment Plant expansion was completed
and connection permitted. To this end, a temporary treatment plant in the
industrial park has been placed on the DP Public Facilities Map (DEIS,
Figure 4).

Recent conversations with the Wastewater Branch regarding the latest DOH
comment indicate that DOH is currently in the process of formulating a
policy toward the applicability of private treatment plants in the Ewa
Plain. This policy would affect not only the subject project, but all
projects in the Ewa Plain, including the housing projects of the State of
Hawaii and the City and County of Honolulu. For this reason, the issue
would be considered unresolved at this time. Coordination with DOH will
continue.
Drinking Water

1. Potable water requirements will be coordinated by the Eva Water Development Corporation. Nonpotable water requirements for the project will be coordinated by Campbell Estate. A portion of the potable requirement is intended to be supplied by the Honouliuli Wells. Another source of water is the desalinization plant currently under construction in the park.

2. It is intended that all the applicable rules and regulations of the Department of Health will be followed.

3. Potable and nonpotable water systems will be kept separate and clearly labeled to avoid the possibility of cross-connection.

Again, thank you for your comments. For your information, your letter together with this response will be included in the Final EIS.

Sincerely,

WILLIAM E. WANKET

cc: Benjamin B. Lee, Chief Planning Officer
MEMORANDUM

TO:        Honorable Marvin T. Miura, Director
           Office of Environmental Quality Control

FROM:      William W. Paty, Chairperson
           Board of Land and Natural Resources

SUBJECT:   Draft EIS
           Kapolei Business - Industrial Park
           Ewa, Oahu

Thank you for giving our Department the opportunity to comment on
this matter. We have reviewed the materials you submitted and have
the following comments.

The subject parcel is well removed from the periphery of the deep
draft harbor and coastline (approximately 1500 to 2000 feet). As
such, we expect only minimal, if any, adverse impact to aquatic
resources. However, the applicant needs to consider both the
short-term (construction-related) and long-term (operational)
measures which would curb erosion, reduce sediment volumes in
run-off and planned drainages, and promote the judicious use of
chemicals (pesticides, herbicides, and fertilizers).

If you have any questions, please feel free to call me or Cathy
Tilton at our Office of Conservation and Environmental Affairs at
548-7837.

WILLIAM W. PATY

cc: DAR
April 3, 1990

The Honorable William W. Paty
Chairperson
Board of Land and Natural Resources
P.O. Box 621
Honolulu, Hawaii 96809

RE: Draft Environmental Impact Statement (DEIS) for Proposed
Kapolei Business-Industrial Park - Response to Comments
Received

Dear Mr. Paty:

Thank you very much for the copy of your letter of February 22, 1990
to the Office of Environmental Quality Control regarding the above-referenced project. We appreciate your efforts in reviewing the DEIS,
and for the information that only minimal, if any, adverse impact to
aquatic resources is anticipated from the project. Regarding your other
comments the following information is offered:

Short-term (construction-related) and long-term (operational) measures
which would curb erosion, reduce sediment volumes in run-off and planned
drainages, and promote the judicious use of chemicals (pesticides,
herbicides, and fertilizers).

Short-Term

Construction phase mitigative measures to curb soil erosion caused by wind
and rainfall will include compliance with Chapter 23, "Grading, Soil Erosion
and Sediment Control" of the Revised Ordinances of Honolulu (DEIS, Page 41)
and the "Soil Erosion Standards and Guidelines" of the Department of Public
Works, City and County of Honolulu.

An erosion control plan will be prepared and submitted for review and
approval by the Department of Public Works. Typical controls that will be
incorporated include:

1. Limiting the extent of exposed areas at any one time;

Pacific Tower
Suite 660
1001 Bishop Street
Honolulu, HI 96813
Phone
(808) 533-4637
FAX 521-5410
2. Structural measures, including dikes, berms, interceptor ditches, sediment traps, and sediment basins;
3. Temporary and permanent vegetative cover or mulching;
4. Spraying chemicals or liquid asphalt;
5. Temporary wind barriers;
6. Plus other measures that may be recommended by appropriate agencies.

Long-Term

Mitigative measures to curb erosion and sediment runoff at the project area are being considered in site planning, grading patterns and drainageway improvements.

Soil erosion is expected to decrease with the development of the business-industrial park. Areas of exposed soil susceptible to erosion will be significantly reduced and replaced by formal landscaping, paved areas and buildings. Onsite runoff will be collected by an underground drainage system for conveyance to the major drainage channel, reducing the potential for erosion to occur. A soil erosion analysis is being completed and will be included in the Final EIS.

Regarding the use of chemicals, only those pesticides, herbicides, and fertilizers approved by the EPA will be used. Also, to promote the judicious use of pesticides, herbicides, and fertilizers, tenants will be encouraged to hire qualified maintenance personnel trained in the proper application of chemicals, avoiding over-application or application during high precipitation periods.

Again, thank you for your comments. For your information, your letter, together with this response will be included in the Final EIS.

Sincerely,

WILLIAM L. WANKET

cc: Benjamin B. Lee, Chief Planning Officer
MEMORANDUM

TO: Marvin T. Miura, Director, OEQC
FROM: Don Hibbard, Director, Historic Preservation Program
SUBJECT: Review of DEIS for Kapolei Business-Industrial Park
Honolulu, Ewa, O'ahu
TMK 9-1-14: 2 (portions); 9-1-15: 1, 13, 16

Thank you for forwarding this draft EIS for our review and comment.

In Section III-E, Archaeological/Historical, the existing
conditions are addressed in 5 separate areas, as we requested in
our review of the EISPN.

The mitigative measures are also addressed by area, but the entire
discussion is couched in the conditional tense. It is not
satisfactory to say that preservation or archaeological testing
"should" take place. A positive commitment to carrying out the
recommendations of the consulting archaeologist must be made, or
reasons presented as to why the recommendations are not to be
carried out.

We are also particularly concerned with the 8-acre parcel at the
intersection of Malakole and Hanua Roads. The archaeological
consultant, the City Council and the State Department of Land and
Natural Resources have recommended these 8 acres for preservation,
a fact which is mentioned in the DEIS. However, no clear
commitment or statement is made as to the disposition of the 8
acres in the DEIS.

DON HIBBARD

cc: The Estate of James Campbell
c/o William E. Wanket, Inc.
Pacific Tower Suite 660
1001 Bishop Street
Honolulu, Hawaii 96813
April 5, 1990

Mr. Don Hibbard
Director
Historic Preservation Program
Department of Land and Natural Resources
P.O. Box 621
Honolulu, Hawaii 96809

RE: Draft Environmental Impact Statement (DEIS) for Proposed Kapolei Business-Industrial Park - Response to Comments Received

Dear Mr. Hibbard:

Thank you very much for the copy of your letter of January 23, 1990 to the Office of Environmental Quality Control regarding the referenced project. We appreciate your efforts in reviewing the DEIS and for the information that in Section III-E, Archaeological/Historical, the existing conditions are addressed in the format requested by your review of the EISP. Information to your other comments is provided:

Archaeological/Historical

The Archaeological/Historical Section of the DEIS will be expanded in the FEIS to reflect the following specific mitigative measures:

Sinkhole Site B6-22
Site is protected by a fence enclosure. The fence was installed and is being maintained by Campbell Estate. The site is on land which is to be made available for purchase, at reduced value, to the State of Hawaii.

Sinkhole Site B6-137
This site is close to B6-22 and is also located on land which will be made available for purchase to the State of Hawaii.

If the State of Hawaii chooses not to purchase the land on which these sites are located, appropriate data recovery plans will be prepared and submitted to DLNR for review and approval prior to the initiation of any construction.
archaeological community and interested segments of the public, while protect-
ing the resources from vandalism and/or destruction from unauthorized entry.

Furthermore, the Estate will explore the possibility of securing the sinkhole
area for a period of five (5) years to allow study and removal of artifacts,
or for the site to be acquired by qualified parties for conservation use.

Again, thank you very much for taking the time to review and provide
comments to the DEIS. For your information, your letter, together with this
response, will be published in the Final EIS.

Sincerely,

[Signature]

WILLIAM E. WANKET

cc: Mr. Benjamin B. Lee, Chief Planning Officer

Encl: (1)
Large Enclosure in Cane Field

Further identification and possibly testing and data recovery will be conducted prior to construction.

Homestead Area

Background research on the origin and history of the Homestead and testing of the sinkholes will be accomplished prior to any construction.

Oahu OR&L Right-of-Way

Present plans do not call for a road along the railroad berm. DLNR-Historic Section will be consulted regarding any development that may impact the berm, including the proposed second access road and the drainage channel.

Malakole Sinkhole Area

A fence enclosure will be installed and access to the site will be permitted for further research (surveying, testing, and data recovery), as well as site visitations. A period of five years is being considered for removal of artifacts, or for the site to be acquired by qualified parties.

Prior to any construction in the areas above, your office will be contacted to ensure that all necessary archaeological data recovery has been satisfactorily achieved.

Malakole Sinkhole

Regarding your statement that "The archaeological consultant, the City Council and the State Department of Land and Natural Resources have recommended these 8 acres for preservation...", we attach as additional information a copy of the Honolulu City Council's Resolution 88-476 (adopted January 11, 1989) requesting the Hawaii State Legislature to allocate funds to the State Department of Land and Natural Resources (DLNR)...to acquire land for an Archaeological Park containing representative samples of sinkholes.

In consideration of its acknowledged archaeological importance, Campbell Estate will install a fence enclosing the Malakole Sinkhole area, similar to the present enclosure around Sinkhole 86-22. This enclosure will enable the site to be accessible for future research, as well as site visitations by the
RESOLUTION

REQUESTING THE HAWAII STATE LEGISLATURE TO ALLOCATE FUNDS TO THE DEPARTMENT OF LAND AND NATURAL RESOURCES TO CONDUCT ARCHEOLOGICAL RESEARCH ON OAHU'S SINK HOLES TO DETERMINE THEIR VALUE AS HISTORICAL AND ARCHEOLOGICAL RESOURCES AND TO ACQUIRE LAND FOR AN ARCHEOLOGICAL PARK CONTAINING REPRESENTATIVE SAMPLES OF SINK HOLES.

WHEREAS, under Chapter 6E of the Hawaii Revised Statutes, it is expressly stated that the State's public policy is "to provide leadership in preserving, restoring and maintaining historic and cultural property, to ensure the administration of such historic and cultural property in a spirit of stewardship and trusteeship for future generations and to conduct activities, plans, and programs in a manner consistent with the preservation and enhancement of historic and cultural property"; and

WHEREAS, the State Department of Land and Natural Resources has been statutorily charged with the responsibility of establishing a comprehensive historic preservation program which includes historic and archeological research such as surveys, excavations, scientific recordings, interpretations and publications on the State's historical and cultural resources; and

WHEREAS, the State Department of Land and Natural Resources has been given the authority to establish new parks by acquisition of property in the name of the State, as the department may deem necessary for the development of the State park system; and

WHEREAS, it has been recently brought to the City Council's attention that there are sink holes located on the Ewa plain, in Waianae and on various private and public properties on the Island of Oahu which may contain objects of historical, botanical or archeological value or interest; and

WHEREAS, to carry out the State's public policy commitment, the Council believes that these sink holes should be identified and studied to determine the need of possibly purchasing these sink holes to preserve the historical and archeological knowledge that they may contain for the people of Hawaii; and

WHEREAS, the State Department of Land and Natural Resources has communicated to the City Council that the Department is concerned with developing a plan for the protection of sink holes and that, given the rate of destruction of such historic sites by development, they would support acquisition of an area containing sink holes for purposes of active preservation; now, therefore,
RESOLUTION

BE IT RESOLVED by the Council of the City and County of Honolulu that this body request the Hawaii State Legislature to allocate funds to the State Department of Land and Natural Resources to conduct research on identifying the sink holes on Oahu that contain objects of historical, botanical or archeological value; and

BE IT FURTHER RESOLVED that the Council request the Hawaii State Legislature to allocate funds to the Department of Land and Natural Resources for development of an archeological park which contains representative samples of sink holes; and

BE IT FINALLY RESOLVED that the Clerk be, and he is hereby, directed to transmit a copy of this Resolution to the President of the Senate and the Speaker of the House of Representatives of the Hawaii State Legislature and to the Chairman of the Board of Land and Natural Resources.

DATE OF INTRODUCTION:

: NOV 29 1988
Honolulu, Hawaii

(OGC/112888/pn)

COUNCILMEMBERS

CITY COUNCIL
CITY AND COUNTY OF HONOLULU
HONOLULU, HAWAII

I hereby certify that the foregoing RESOLUTION was adopted by the COUNCIL OF THE CITY AND COUNTY OF HONOLULU on the date and by the vote indicated to the right.

ATTEST:

RAYMOND K. PUA
CITY CLERK

ARNOLD MORGADO, JR.
CHAIR AND PRESIDING OFFICER

Dated: JAN 11 1989

Reference:

Report No.

Resolution No.

88-476
31 Jan. 1990

Department of General Planning
City & County of Honolulu
650 S. King Street
Honolulu, Hawaii 96813

Dear Sirs:

I am writing on behalf of the Natural Area Reserves System Commission to offer comment on the draft environmental impact statement prepared by William E. Wanket, Inc., for the Kapolei Business-Industrial Park. The specific section for comment deals with the 8-acre parcel containing the Malakole Road/Hanua Road Sinkholes (pages 51-52). Recently, several Commission members, accompanied by Dr. Alan C. Ziegler, visited this area. The Commission members felt this 8-acre parcel contained features of cultural, geological, and paleontological significance which should be preserved for future scientific and educational purposes. We concur with the assessment in the draft environmental impact statement (page 51) that this parcel should be preserved as a scientific and educational resource and strongly urge that all necessary steps be taken to assure the integrity of this parcel. One possible approach would be a redesignation of this parcel to conservation usage.

The Natural Area Reserves System Commission would appreciate receiving a copy of the final environmental impact statement. If there are any questions regarding these comments, please address them to me.

Sincerely yours,

M. Lee Goff
Chair
Natural Area Reserves System Commission

cc: NARS Commission Members
    R. Lee
    W. Paty
    W. Yoshimitsu
    W.E. Wanket
    A.C. Ziegler
March 23, 1990

Mr. M. Lee Goff
Chair
Natural Area Reserves System Commission
Department of Land and Natural Resources
P.O. Box 621
Honolulu, Hawaii 96809

RE: Draft Environmental Impact Statement (DEIS) for the Proposed Kapolei Business-Industrial Park - Response to Comments Received

Dear Mr. Goff:

Thank you very much for your letter of January 31, 1990, expressing support for the preservation of the Malakole Sinkhole Area. In response, we offer the following information.

In consideration of its acknowledged archaeological importance, Campbell Estate will install a fence enclosing the Malakole Sinkhole area, similar to the present enclosure around Sinkhole 86-22. This enclosure will enable the site to be accessible for future research, as well as site visitations by the archaeological community and interested segments of the public, while protecting the resources from vandalism and/or destruction from unauthorized entry.

Furthermore, the Estate will explore the possibility of securing the sinkhole area for a period of five (5) years to allow study and removal of artifacts, or for the site to be acquired by qualified parties for conservation use. With reference to your suggestion that "...all necessary steps be taken to assure the integrity of this parcel [including]...a redesignation of this parcel to conservation usage." we attach for your information a copy of the Honolulu City Council's Resolution 88-476 (adopted January 11, 1989) requesting the Hawaii State Legislature to allocate funds to the State Department of Land and Natural Resources (DLNR)...to acquire land for an Archaeological Park containing representative samples of sinkholes.

(Pacific Tower
Suite 662
1001 Bishop Street
Honolulu, hi 96813
Phone (808) 533-4937
FAX 521-5410)
Again, thank you very much for taking the time to review and provide comments to the DEIS. For your information, your letter, together with this response, will be published in the Final EIS.

Sincerely,

WILLIAM E. WANKET

cc: Mr. Benjamin B. Lee, Chief Planning Officer

Encl (1)
REQUESTING THE HAWAII STATE LEGISLATURE TO ALLOCATE FUNDS TO THE DEPARTMENT OF LAND AND NATURAL RESOURCES TO CONDUCT ARCHEOLOGICAL RESEARCH ON OAHU'S SINK HOLES TO DETERMINE THEIR VALUE AS HISTORICAL AND ARCHEOLOGICAL RESOURCES AND TO ACQUIRE LAND FOR AN ARCHEOLOGICAL PARK CONTAINING REPRESENTATIVE SAMPLES OF SINK HOLES.

WHEREAS, under Chapter 6E of the Hawaii Revised Statutes, it is expressly stated that the State's public policy is "to provide leadership in preserving, restoring and maintaining historic and cultural property; to ensure the administration of such historic and cultural property in a spirit of stewardship and trusteeship for future generations and to conduct activities, plans, and programs in a manner consistent with the preservation and enhancement of historic and cultural property"; and

WHEREAS, the State Department of Land and Natural Resources has been statutorily charged with the responsibility of establishing a comprehensive historic preservation program which includes historic and archeological research such as surveys, excavations, scientific recordings, interpretations and publications on the State's historical and cultural resources; and

WHEREAS, the State Department of Land and Natural Resources has been given the authority to establish new parks by acquisition of property in the name of the State, as the department may deem necessary for the development of the State park system; and

WHEREAS, it has been recently brought to the City Council's attention that there are sink holes located on the Ewa plain, in Waimanalo and on various private and public properties on the Island of Oahu which may contain objects of historical, botanical or archeological value or interest; and

WHEREAS, to carry out the State's public policy commitment, the Council believes that these sink holes should be identified and studied to determine the need of possibly purchasing these sink holes to preserve the historical and archeological knowledge that they may contain for the people of Hawaii; and

WHEREAS, the State Department of Land and Natural Resources has communicated to the City Council that the Department is concerned with developing a plan for the protection of sink holes and that, given the rate of destruction of such historic sites by development, they would support acquisition of an area containing sink holes for purposes of active preservation; now, therefore,
RESOLUTION

BE IT RESOLVED by the Council of the City and County of Honolulu that this body request the Hawaii State Legislature to allocate funds to the State Department of Land and Natural Resources to conduct research on identifying the sink holes on Oahu that contain objects of historical, botanical or archeological value; and

BE IT FURTHER RESOLVED that the Council request the Hawaii State Legislature to allocate funds to the Department of Land and Natural Resources for development of an archaeological park which contains representative samples of sink holes; and

BE IT FINALLY RESOLVED that the Clerk be, and he is hereby, directed to transmit a copy of this Resolution to the President of the Senate and the Speaker of the House of Representatives of the Hawaii State Legislature and to the Chairman of the Board of Land and Natural Resources.

DATE OF INTRODUCTION:
NOV 29 1988
Honolulu, Hawaii

(ocos/112888/pn) -2-

CITY COUNCIL
CITY AND COUNTY OF HONOLULU
HONOLULU, HAWAII

I hereby certify that the foregoing RESOLUTION was adopted by the COUNCIL OF THE CITY AND COUNTY OF HONOLULU on the date and by the vote indicated to the right.

ATTEST:

RAYMOND A. PUA
CITY CLERK

ARNOLD MORGADO, JR.
CHAIR AND PRESIDING OFFICER

Dated JAN 11 1989

ADOPTED MEETING HELD

JAN 11 1989

AYE NO AYE

AMONUELO

DODO

FELIX

KANAMU

LIMA

MORGADO

Resolution No.
88-476
February 13, 1990

Mr. Benjamin Lee
Chief Planning Officer
Department of General Planning
City and County of Honolulu
650 South King Street
Honolulu, Hawaii 96813

Dear Mr. Lee:

Draft Environmental Impact Statement (EIS)
Kapolei Business-Industrial Park

We have reviewed the draft EIS and offer the following comments for your consideration:

1. The last paragraph on page 2: The future 56 acres Barbers Point Harbor expansion area should be shown on the Development Plan Public Facilities Map and included as part of the development before being turned over to the State.

2. On page 23, more information on the location of the second access road should be provided (it should be indicated on a map). While shown on Figure 2 of page 8, Traffic Impact Assessment Report, Appendix L, we find it incomplete. It is shown ending at Malakole Road but there is no indication where it is connected at the north segment. The second access and the proposed Roads "A" and "B" allow trucks to circumvent the State's proposed truck weighing station on Kalaioa Boulevard between Roads "A" and "B". The road layout should be amended to eliminate the circumvention of the proposed truck weigh station.

3. All Figures, such as Figure 6 "On-Site Drainage Areas" shown on page 15, Appendix A, should be consistent with the roadway layout for the proposed development shown in Appendix L.
4. Campbell Estate has agreed with the State to build Road "D" in accordance with State and Federal requirements. This will then become the main access to the harbor. Upon completion and acceptance, the State will transfer Malakole Road back to Campbell Estate. The State Highways Division should be consulted early to discuss and agree on the Rights-of-Way requirements for Road "D" which should be designed as an urban minor arterial facility. In addition, the traffic impact analysis should reflect traffic conditions when Road "D" eventually becomes the State's primary access to the harbor. To ensure the proper design for Road "D", the traffic assignment should be re-analyzed to account for its higher highway functional classification.

5. The proposed development is in the take-off and landing flight pattern of the Barbers Point Naval Air Station. Noise attenuating mitigation measures should be considered and implemented as required in the planning and design of the business and industrial park's structures to minimize the noise impacts on their occupants.

We appreciate this opportunity to provide comments.

Very truly yours,

Edward Y. Hirata
Director of Transportation

bcc: The Estate of James Campbell
March 27, 1990

WILLIAM
E.
WANKET
INC.
Land Use Consultant

Mr. Edward Y. Hirata
Director of Transportation
Department of Transportation
869 Punchbowl Street
Honolulu, Hawaii 96813-5097

RE: Draft Environmental Impact Statement (DEIS) on the Proposed Kapolei Business-Industrial Park - Response to Comments Received

Dear Mr. Hirata:

Thank you very much for the copy of your letter of February 13, 1990 to the Department of General Planning regarding the referenced project. We appreciate your efforts in reviewing the DEIS, and offer the following information in response to your comments.

Optional 56-Acre Expansion of Barbers Point Harbor

As part of an executed agreement between the Estate and the State of Hawaii (Document Evidencing Petitioner's Commitments, dated April 11, 1989 [X8911276]), the State has the option to acquire, at reduced value, the referenced 56-acre site for the purpose of expanding Barbers Point Harbor.

The proposed designation of the site for Industrial on the DP Land Use Map is intended for maritime activities. The intended zoning for the site is I-3 Waterfront Industrial, which is the same zoning district that would be placed on the land if the State acquired the site for the expansion of Barbers Point Harbor. At such time as the State has confirmed its plans for the expansion, the Public Facilities Map can be amended to designate the site as "PF."

Second Access Road

The second access road is intended to connect to the proposed Kapolei Parkway, or alternatively to Kaaawa Boulevard. While connection to the proposed Kapolei Parkway is preferred, this alternative will require discussions with other parties that have development options in the area. The FEIS will include the enclosed map showing the proposed connection alternatives.

Pacific Tower
Suite 660
1001 Bishop Street
Honolulu, HI 96813
Phone
(808) 533-4937
FAX 521-5410
Truck Weigh Station

Meetings have been held with DOT Highways personnel regarding the future truck weigh station along Kalaekoa Boulevard. During these meetings, the subject of a second access into the industrial park and its impact on the operation of the truck weigh station was also discussed. Based on these discussions, amendment of the roadway layout would not be necessary. It was mentioned by DOT that the truck weigh station is not operated continuously and that the second access and Road "A" could be closed to heavy truck traffic during hours of operation. This would require heavy trucks to pass the weigh station before leaving the industrial park. The second access would be open during peak hour traffic, when the need for an additional access is the greatest.

Roadway Figures

The Figures in Appendix L are schematic representations of the roadway layout in Figure 6 of Appendix A, with only those roads having significant impact on traffic shown.

Future Road "D"

Reanalysis of traffic assignment is not necessary, since the Traffic Impact Study conducted by Pacific Planning and Engineering did take into account Future Road D functioning as the primary access road into Barbers Point Harbor. Vehicle trips from the harbor were assigned accordingly with an estimated 70% of harbor related traffic using Road D and the remaining 30% using Malakole Road.

Regarding the Rights-of-Way requirements for Road "D", initial discussions with DOT regarding the requirements have been held. Coordination with DOT Highways will continue as planning of the Kapolei Business-Industrial Park progresses. All roadway requirements will be met.

Noise Impacts - Barbers Point Naval Air Station

The aircraft Day-Night Average Sound Level (Ldn) generated by HIA and NASBP is less than 65 dB throughout the project site and is less than the 70 dB Ldn guideline for clear acceptability for commercial/industrial areas. Our noise consultant's, Darby and Associates, findings concur with the Navy's findings that the project presents no incompatibility with the Navy's AICUZ land use guidelines for NASBP. In the design stage, however, every effort will be made to minimize noise impacts on site occupants.

Again, thank you for taking the time to review and provide comments to the DEIS. For your information, your letter, together with this response, will be published in the Final EIS.

Sincerely,

WILLIAM K. WANKET

cc: Benjamin B. Lee, Chief Planning Officer
New Promise in Hawaii's Job Market

Over the past few months there has been considerable comment about Hawaii's extremely low unemployment rate. Most recently, there have been expressions of concern as both business and government compete for workers. The following comments attempt to shed light on some of the real issues of importance in order to ease these concerns.

At 2.4 percent, Hawaii's rate of unemployment is the lowest of any state in the nation and one of the lowest ever recorded in American history. This situation constitutes a sharp reversal from the disturbing job outlook that existed for the state a few years ago. And it is a development that is producing economic conditions that must be considered highly desirable despite some doubts over the tight labor market.

Five years ago there were a number of reasons to be concerned that Hawaii faced serious long-term problems in its ability to generate jobs and incomes. For several years, Hawaii had been producing net additions to the state's labor market that exceeded annual job growth by an average 10,000. More importantly, per capita income had failed to rise for more than a decade and, in fact, had been drifting down since 1978. And there was no local development on the horizon that appeared able to alter the trend significantly. All indications were that without some unusual external force, the shortfall in jobs and incomes would continue indefinitely, resulting in sizable levels of unemployment or emigration to mainland markets.

A Changed Economy

The nature of Hawaii's economy by 1984 was clearly different from what it had been during the first two decades of statehood. Important traditional sectors of the economy appeared to be facing stagnation or enduring decline. Following an extended period in which the major sectors of production had been relatively balanced and consistent, Hawaii's agricultural and military sectors began to lag behind the visitor industry even though that industry was itself showing little prospect of rapid expansion.

During the 1970s, the military sector and related industries expanded because of the Vietnam War, and the visitor industry expanded even more rapidly because of the introduction of wide-bodied passenger aircraft. Those forces for growth either disappeared or played themselves out by 1980. The value of agricultural output, which had experienced a surge in the 1970s because of periods of world sugar shortage and the introduction of new and diversified crops, had by 1984 dropped in real terms to 80 percent of the 1974 level, and employment in the sector had fallen by about 10 percent. All three of these sectors lacked local markets or stimulus for growth. And all other economic activities were sufficiently fragmented or dependent on these three industries to offer little power for job and income growth on their own.

A Need for Outside Stimulus

Because there was very little in the way of local investment capital or self-generated corporate growth that could be looked to for rapid job creation, it became apparent to most of Hawaii's private and government leadership that increased outside investment was needed for job creation. In part because of that decision, but primarily because of some major changes in attitudes and purpose of interested parties outside Hawaii, the Islands began to experience an unusual surge in investment from abroad. Over the course of the last few years all but one of Hawaii's Big Five companies and a sizeable number of other firms have come under new out-of-state management and ownership.

It is important to remember, however, that these out-of-state suitors seldom displaced local ownership. Most of these companies or properties had been originally created or capitalized by investors from outside Hawaii. The real difference has been
in the amounts of capital being brought into Hawaii for the purchase and development or expansion of firms in the economy. Over the last four years of the decade, an average $2 billion per year has been invested in Hawaii, and current commitments are likely to keep that pace sustained through the mid-1990s.

This massive investment interest in Hawaii has grown out of a number of causes: State and local government pursuit of outside investment, Japanese investors' rising currency advantage, U.S. investors' rising interest in leveraged buyouts, Australian investors' capacity for injecting resources into firms with the promise of higher performance, and the interest of all investors in the growth possibilities in what they perceived as underutilized and undervalued assets of most of the target companies. The incoming buyers' objectives have been to raise the value of their new acquisitions by increasing efficiency. Frequently, this has meant some restructuring to create a leaner and more productive company work force.

In most cases, industry restructuring causes layoffs and an excess of labor that normally keeps companies from making this adjustment quickly. However, if some companies would have found it difficult to rationalize their workforces on their own, the new conditions in the local labor market have dramatically forced that achievement on them. The expansive effects of the current foreign investment in Hawaii have actually caused jobs to appear faster than company job pruning has made labor available. As a result of this market tightening, companies are being forced to introduce efficient labor practices.

Away From High Underemployment
This has not occurred without some pain. Hawaii's labor market today is so tight that many firms, as well as some public agencies, have declared crisis conditions. Not only have labor costs risen dramatically for some firms or industries, but lost production and sales have raised frustration levels. This has been especially true for those industries that see growth in other sectors as coming at the expense of decline in their own. Having difficulty in sustaining traditional patterns of production, some firms have issued warnings about permanent contraction and serious damage to their industries.

"This reallocation of labor can yield increasing real output (and real incomes) even though the total labor force remains unchanged."

However, cries of alarm in most instances reveal an underestimation of industry's flexibility and an unhealthy interest in sustaining what have been in many instances poor patterns of labor use in Hawaii. One of the chief characteristics of Hawaii's employment situation has been that despite relatively low levels of unemployment, the work force has experienced a high degree of what is known as underemployment (use of only a fraction of a worker's productive ability) and consequently lower income than would otherwise be produced.

In most contiguous states of the nation, underemployment is partly prevented by the ability of labor to commute easily from one state or area to another. Unfortunately, it is difficult for residents of Hawaii not only to commute to another state but even to another part of their own state. Because most local firms are assured of a relatively immobile labor force, they often do not have sufficient incentive to raise labor productivity and incomes.

As a result, there is room for significant reduction of underemployment in Hawaii through nothing more than the rearrangement of workers among more appropriate occupations, not to mention the introduction of new technologies. A radical redistribution of labor and the introduction of new technology, while inconvenient and perhaps painful, are well within the reach of the more dynamic firms and industries in Hawaii.

Gains in Productivity
Whether this revitalizing of the labor force comes as the result of voluntary action by firms or, more likely, as the result of a very tight labor market as presently exists in Hawaii, there should always be a rise in the aggregate output and income of the economy when it occurs. Whenever labor is bid away from inflexible and less dynamic industries to more dynamic sectors of the economy, opportunities for higher income for workers are created. And incentives are created for both the "loser" and "gainer" firms or industries to utilize labor more efficiently—the former because it has fewer workers to work with and the latter because it is paying more for its new worker. This reallocation of labor can yield increasing real output (and real incomes) even though the total labor force remains unchanged. Although some employers may not like the suggestion that they should be happy that their employees are leaving for better paying opportunities across the street, this development for the economy as a whole is much to be desired. And though this prospect is often not attractive to industry or to government, it should not be resisted but indeed facilitated through provision of opportunities for redevelopment of skills, for geographical mobility of labor, for increasing information.
An Economic Assessment of the Federated States of Micronesia

The following is condensed from a more complete report, An Economic Assessment of the Federated States of Micronesia (FSM), published in September 1989 and available on request from the Economics Department.

The Federated States of Micronesia (FSM) is comprised of four states: Pohnpei (formerly Ponape), Truk; Yap and Kosrae. What is known as the Federated States of Micronesia (FSM) today is a part of what was the Trust Territory of the Pacific Islands (TTPI) from the end of World War II until its dissolution in the 1970s. Situated about 2,500 miles west of Hawaii, the FSM covers more than a million square miles of the Western Pacific ocean and 607 small islands. Palau, to the west of the FSM, completes the Caroline Islands Archipelago.

The FSM had a total resident population of 94,534 in 1986, almost half of which was under the age of fifteen. The most populated state is Truk, with 47,724 residents, followed by Pohnpei with 28,820 and Yap with 11,322. The State of Kosrae had the smallest population of 6,688. Approximately one-third of the entire FSM population resides in urban and semi-urban areas. The population is growing rapidly. The annual growth rate in the 1980s has been estimated at 3.5 percent and is expected to remain at that level in the foreseeable future.

Economic Characteristics

The FSM is a unique developing economy: its exclusive access to the vast U.S. market, it receives guaranteed sums of money annually. From the early 1950s through 1962, U.S. economic assistance to the FSM was limited to Congressional appropriations allocated to the various TTPI districts by the Department of the Interior (DOI). The amount of aid to the FSM remained stable at around $5.5 to $6.0 million annually through the 1950s. A review of U.S. policy in the Trust Territory in general and economic aid in particular was undertaken in 1961. Subsequently, U.S. economic aid to the FSM increased from $6.1 million in 1962 to $17.0 million in 1963. In 1970, total U.S. aid to the FSM reached $54.6 million. In just another nine years, U.S. aid to the FSM reached a record $138.7 million, of which $54.3 million was appropriated for capital improvement projects (CIP). Total aid dropped to $119.9 million in 1982, partially as a result of the Reagan budget cuts, and CIP funding almost vanished, dropping to $2.0 million. From 1982 to 1985, while the U.S. and the FSM negotiated the final provisions of COFA, total U.S. aid remained close to $100 million annually. Any substantial decline in U.S. payments to the FSM would have an immediate impact on the nation's economy and, therefore, on the living standards of its people. An examination of the FSM's economic structure makes it clear how essential U.S. payments are for its economic survival.

Strong communal values, i.e., sharing of benefits as well as costs, among all members of the extended family—which ultimately means the entire nation—have given rise to government as the only major employer and provider of income in the FSM. Excepting trade and few other service providers, there is no private market economy to speak of. By most accounts, about two-thirds of the employed labor force works for government at one level or another.
JAN 16 1990

Department of General Planning
City and County of Honolulu
650 South King Street, 8th Floor
Honolulu, Hawaii 96813

Gentlemen:

Subject: Kapolei Business-Industrial Park
Draft Environmental Impact Statement

Thank you for the opportunity to review the subject document. We have no comments to offer.

Should there be any questions, please contact Mr. Cedric Takamoto of the Planning Branch at 548-7192.

Very truly yours,

[Signature]
TEUANE TOMINAGA
State Public Works Engineer

CT:jk
ce: The Estate of James Campbell
Dr. Marvin Miura
January 18, 1990

Mr. Teuane Tominaga  
State Public Works Engineer  
State Department of Accounting and  
General Planning, Division of  
Public Works  
P.O. Box 119  
Honolulu, Hawaii 96810

RE: Draft Environmental Impact Statement (DEIS) for Proposed Kapolei Business-Industrial Park – Response to Comments Received

Dear Mr. Tominaga:

Thank you very much for the copy of your letter of January 16, 1990 to the Department of General Planning regarding the referenced project. We appreciate your efforts in reviewing the DEIS.

For your information, your letter, together with this response, will be published in the Final EIS.

Sincerely,

WILLIAM E. WANKET

cc: Benjamin B. Lee, Chief Planning Officer
University of Hawaii at Manoa

Mr. William E. Wanket, President
William E. Wanket, Inc.
Pacific Tower 660
1001 Bishop Street
Honolulu, Hawaii 96813

February 4, 1990

Dear Mr. Wanket:

I would like to offer some comments concerning the preservation of the sinkhole area immediately north of Makakole Road. This is the area which your December 1989 draft environmental impact statement (Kapolei Business-Industrial Park, Ewa, Oahu) advises to be preserved.

As a professional ornithologist and evolutionary biologist, these sinkholes are a treasure to the scientific community. The information already derived from fossil bones gathered from these sinkholes has enhanced our understanding of evolution on isolated oceanic islands. The significance of this is akin to discovering dinosaur or prehistoric mammal fossils in a mainland situation. Organisms that no longer exist, and that are bizarre by comparison with modern day species, offer a fascinating and priceless glimpse into the past. Who knows what new species are buried in the numerous sinkholes that are not yet investigated? We shall never know unless the sinkhole area is preserved for scientific investigation.

As a public educator, I can attest to the importance of these sinkholes for current and future generations of students in the state. I recently took 16 students from my Avian Biology lab to the site. None had previously been to the site and only 3 had even heard about the sinkholes. The astonishment in the eyes of these undergraduates was obvious throughout the morning. The sinkhole experience had a major impact on these students. Aside from the curiosity that was stirred, I am sure that each person has greater pride in being a citizen of Hawaii and perhaps will be more concerned about preserving what is left of the native plants and animals of the state. I therefore feel that the sinkholes have significant social as well as scientific implications. Indeed, I shall attempt to lead field trips to this area in several of the courses that I teach each year.

In summary, I hope that you will emphasize the importance of preserving these areas even more strongly in the final EIS.

Sincerely,

Leonard A. Freed
Associate Professor

AN EQUAL OPPORTUNITY EMPLOYER
March 20, 1990

Mr. Leonard A. Freed
University of Hawaii at Manoa
Associate Professor
Edmondson Hall
The Mall
Honolulu, Hawaii 96822

RE: Draft Environmental Impact Statement (DEIS) for the Proposed Kapolei Business-Industrial Park – Response to Comments Received

Dear Mr. Freed:

Thank you very much for your letter of February 4, 1990, expressing support for the preservation of the Malakole Sinkhole Area. In response, we offer the following information.

In consideration of its acknowledged archaeological importance, Campbell Estate will install a fence enclosing the Malakole Sinkhole area, similar to the present enclosure around Sinkhole B6-22. This enclosure will enable the site to be accessible for future research, as well as site visitations by the archaeological community and interested segments of the public, while protecting the resources from vandalism and/or destruction from unauthorized entry.

Furthermore, the Estate will explore the possibility of securing the sinkhole area for a period of five (5) years to allow study and removal of artifacts, or for the site to be acquired by qualified parties. In this connection, we attach for your information a copy of the Honolulu City Council's Resolution 88-476 (adopted January 11, 1989) requesting the Hawaii State Legislature to allocate funds to the State Department of Land and Natural Resources (DLNR)...to acquire land for an Archaeological Park containing representative samples of sinkholes.

Again, thank you very much for taking the time to review and provide comments to the DEIS. For your information, your letter, together with this response, will be published in the Final EIS.

Sincerely,

WILLIAM E. WANKET

cc: Mr. Benjamin B. Lee, Chief Planning Officer

Encl (1)
RESOLUTION

REQUESTING THE HAWAII STATE LEGISLATURE TO ALLOCATE FUNDS TO THE DEPARTMENT OF LAND AND NATURAL RESOURCES TO CONDUCT ARCHAEOLOGICAL RESEARCH ON OAHU'S SINK HOLES TO DETERMINE THEIR VALUE AS HISTORICAL AND ARCHAEOLOGICAL RESOURCES AND TO ACQUIRE LAND FOR AN ARCHAEOLOGICAL PARK CONTAINING REPRESENTATIVE SAMPLES OF SINK HOLES.

WHEREAS, under Chapter 6E of the Hawaii Revised Statutes, it is expressly stated that the State's public policy is "to provide leadership in preserving, restoring and maintaining historic and cultural property, to ensure the administration of such historic and cultural property in a spirit of stewardship and trusteeship for future generations and to conduct activities, plans, and programs in a manner consistent with the preservation and enhancement of historic and cultural property"; and

WHEREAS, the State Department of Land and Natural Resources has been statutorily charged with the responsibility of establishing a comprehensive historic preservation program which includes historic and archeological research such as surveys, excavations, scientific recordings, interpretations and publications on the State's historical and cultural resources; and

WHEREAS, the State Department of Land and Natural Resources has been given the authority to establish new parks by acquisition of property in the name of the State, as the department may deem necessary for the development of the State park system; and

WHEREAS, it has been recently brought to the City Council's attention that there are sink holes located on the Ewa plain, in Waianae and on various private and public properties on the Island of Oahu which may contain objects of historical, botanical or archeological value or interest; and

WHEREAS, to carry out the State's public policy commitment, the Council believes that these sink holes should be identified and studied to determine the need of possibly purchasing these sink holes to preserve the historical and archeological knowledge that they may contain for the people of Hawaii; and

WHEREAS, the State Department of Land and Natural Resources has communicated to the City Council that the Department is concerned with developing a plan for the protection of sink holes and that, given the rate of destruction of such historic sites by development, they would support acquisition of an area containing sink holes for purposes of active preservation; now, therefore,
RESOLUTION

BE IT RESOLVED by the Council of the City and County of Honolulu that this body request the Hawaii State Legislature to allocate funds to the State Department of Land and Natural Resources to conduct research on identifying the sink holes on Oahu that contain objects of historical, botanical or archaeological value; and

BE IT FURTHER RESOLVED that the Council request the Hawaii State Legislature to allocate funds to the Department of Land and Natural Resources for development of an archaeological park which contains representative samples of sink holes; and

BE IT FINALLY RESOLVED that the Clerk be, and he is hereby, directed to transmit a copy of this Resolution to the President of the Senate and the Speaker of the House of Representatives of the Hawaii State Legislature and to the Chairman of the Board of Land and Natural Resources.

INTRODUCED BY:

DATE OF INTRODUCTION:

NOV 29 1988
Honolulu, Hawaii

(Councilmembers)

CITY COUNCIL
CITY AND COUNTY OF HONOLULU
HONOLULU, HAWAII

I hereby certify that the foregoing RESOLUTION was adopted by the COUNCIL OF THE CITY AND COUNTY OF HONOLULU on the date and by the vote indicated to the right.

ATTEST:

RAYMOND K. PLA
CITY CLERK

ARNOLD MORGADO, JR.
CHAIR AND PRESIDING OFFICER

Dated JAN 1 1 1989

ADOPTED MEETING HELD

JAN 1 1 1989

Reference:

Report No.

Resolution No.

88-476
MEMORANDUM

TO: Honorable Benjamin B. Lee
   Chief Planning Officer
   City and County of Honolulu
   Department of General Planning
   650 South King Street
   Honolulu, HI 96813

FROM: Marvin T. Miura, Ph.D., Director
      Office of Environmental Quality Control

SUBJECT: Draft Environmental Impact Statement
         Kapolei Business - Industrial Park

We would like to support the comments and recommendations made by the Department of Agriculture regarding the subject draft. We believe that these are very important concerns and should be addressed in sufficient detail.

We appreciate the diligent attention that your department gives to the environmental impact statement process and if we can be of assistance to you please contact Louise Peterson of my staff at 548-6915.

Thank you.

Attachment

cc: /William E. Wanket, Inc.
    Office of State Planning
    Department of Agriculture
Mr. Benjamin B. Lee  
Chief Planning Officer  
Department of General Planning  
City and County of Honolulu  
650 South King Street  
Honolulu, Hawaii 96813

Dear Mr. Lee:

Subject: Draft Environmental Impact Statement (DEIS) for Kapolei Business-Industrial Park 
Proposed Amendment to the Ewa Development Plan  
Land Use Map  
Agriculture to Industrial and Commercial  
The Estate of James B. Campbell  
TMK: 9-1-14; por. 2  
9-1-15: 1, 13, 16 Ewa, Oahu  
Area: approximately 552.1 acres

The Department of Agriculture has reviewed the subject document and offers the following comments.

According to the DEIS, the applicant is seeking to construct an industrial/commercial park to the east of the Barbers Point Deep Draft Harbor. One hundred and forty-five acres of the site is leased to Oahu Sugar Company (OSC) and is in sugarcane cultivation. Our information indicates that the affected OSC field 004 is drip-irrigated.

References to the Agricultural Lands of Importance to the State of Hawaii (ALISH) system, the Land Study Bureau's Detailed Land Classification for Oahu, and the Soil Conservation Service Soil Survey for Oahu are correct.

SPECIFIC COMMENTS

Impact on Oahu Sugar Company

Page 79 of the DEIS indicates that the short- and intermediate-term effects of developing the subject property will be limited because the affected lands are: (1) of inferior
quality, and (2) on the outskirts of the plantation, resulting in a more compact plantation. The future of OSC "is uncertain given the outlook for flat or declining sugar prices and costs which increase with inflation," and "economic incentives may not favor renewal of the major leases" (DEIS, pages 79-80). From the information provided in Appendix J ("Proposed Kapolei Business-Industrial Park: Impact on Agriculture," Decision Analysts Hawaii, Inc.; November, 1989), the subject project, and the other projects affecting OSC operations that are planned or have received State and/or County zoning approvals, will eventually have a very significant adverse impact on OSC.

The projected cumulative intermediate (to the year 1995) impact of multiple project development in Central Oahu and Ewa of about 2,000 acres (Appendix J, page 10) will not diminish the full impact of the eventual urbanization of sugarcane cultivated lands. The intermediate impact will reduce OSC acreage under cultivation to 11,490, which is perilously close to the minimum acreage needed for the plantation to remain economically viable in a single mill configuration (estimated to be about 10,669 acres at 14.06 tons of sugar per acre per year, based on 1987 yield figures, or 11,284 acres based on 1988 yield figures).

In the long run, the significant impact on OSC will be that cultivable acreage available to OSC after full development of the planned and proposed projects (about 7,700 acres) will be far below the minimum acreage needed to remain economically viable in a single-mill operation and much less than the acreage required for the present double-mill configuration. Annual sugar yields (expressed in tons of sugar per acre or TSA) would have to increase by about 47 percent over the 1988 OSC average yield (13.16 TSA) to about 19.4 TSA for the 7,700 acre to produce the 67,500 tons of raw sugar required of a single-mill operation (based on the harvestable acreage assumption of Appendix J, Table 3).

In either case, OSC will be forced to modify its operations and increase the yields from its remaining fields to forestall the inevitable situation when the company finds it no longer economic to remain in operation.

Consistency with State Plans

From the above discussion, it is evident that the project is inconsistent with the objectives, policies and guidelines relating to agriculture in the Hawaii State Plan and the State Agriculture Functional Plan (June, 1985) (Appendix J, Table 6, pages 25-26).
Impact on Diversified Agriculture

The DEIS states that "it is extremely doubtful that the project would adversely affect the growth of diversified agriculture in Hawaii" (page 81). This conclusion is based on the supposed relative abundance of arable lands formerly in sugarcane and pineapple cultivation, the supposed availability of these lands for profitable replacement crops and the small amount of lands and water required to grow diversified crops.

Appendix J states that the Land Evaluation and Site Assessment (LESA) Commission projections for prime agricultural lands needed for diversified agriculture are "high in that diversified agriculture is growing more slowly than LESA Commission projections" (page 20) and that the total additional acreage needed to accommodate diversified agriculture to the year 2000 is "probably far less than 2,000 acres" for the State as compared to the LESA Commission projections. The LESA Commission purposefully took a more optimistic and broad view of the future of diversified agriculture in Hawai‘i than does the DEIS. In the determination and protection of "important agricultural lands," it is the State's duty to assure the availability of agriculturally suitable lands. Therefore, it is appropriate that the State take a conservative, long-range view and maintain what appears to be a surplus of productive lands as compared to the DEIS' findings. Incremental losses of a resource like arable lands, if left uncontrolled, will have a devastating and irreversible cumulative effect on the viability of agriculture, and in particular, Oahu Sugar Company. Once agricultural lands are urbanized there is no return. This cannot be overemphasized.

To summarize, we are convinced that the agricultural resources of the area and that of OSC in particular will be adversely affected by the proposed development. Therefore, using the project site for the proposed use would be inconsistent with applicable objectives, policies, priority guidelines, and implementing actions of the Hawaii State Plan (as amended) and the adopted State Agriculture Functional Plan (1985) as they relate to sugarcane and diversified agriculture.

CONCLUSION

The Department of Agriculture strongly recommends that both the subject project's immediate impacts and its contribution to the long-term cumulative impact of ongoing, planned, and proposed urban development adversely affecting the Oahu Sugar Company be more thoroughly discussed in the Final EIS. We hereby request a copy of the Final EIS upon its availability.
Thank you for the opportunity to comment.

YUKIO KITAGAWA
Chairperson, Board of Agriculture

cc: William E. Wanket, Inc.
Office of State Planning (attention: Land Use Division)
Office of Environmental Quality Control
February 23, 1990

Mr. Marvin T. Miura, Ph.D.
Director
Office of Environmental Quality Control
465 South King Street
Room 104
Honolulu, Hawaii 96813

RE: Draft Environmental Impact Statement (DEIS) for Proposed Kapolei Business-Industrial Park - Response to Comments Received

Dear Mr. Miura:

Thank you very much for the copy of your letter of February 16, 1990 to the Department of General Planning regarding the referenced project. We agree that the Department of Agriculture expressed important concerns in their comment letter of February 6, 1990. We have responded to the issues raised, as it pertains to the proposed Kapolei-Business Industrial Park, and attach a copy of our response for your information.

Furthermore, in light of your comments, I have asked your assistance in arranging a meeting between myself, Bruce Plasch (author of the Agricultural Impact Study), Campbell Estate and representatives from your office, the Department of Agriculture, and the Office of State Planning to discuss the agricultural impacts associated with the proposed Kapolei Business-Industrial Park. This meeting has been scheduled for February 28, 1990 at 10 AM in the 5th floor conference room of Campbell Estate, 828 Fort Street Mall, Honolulu, Hawaii. Following the meeting, it may be necessary to further respond in writing to the issues raised by the Department of Agriculture.

Again, thank you for your comments. For your information, your letter, together with this response, will be published in the Final EIS.

Sincerely,

WILLIAM E. WANKET

cc: Benjamin B. Lee, Chief Planning Officer
    Department of Agriculture
    Office of State Planning

Encl: (1)
February 16, 1990

Mr. Yukio Kitagawa
Chairperson
Board of Agriculture
1428 South King Street
Honolulu, Hawaii 96814-2512

RE: Draft Environmental Impact Statement (DEIS) for Proposed Kapolei Business-Industrial Park - Response to Comments Received

Dear Mr. Kitagawa:

Thank you very much for the copy of your letter of February 6, 1990 to the Department of General Planning regarding the referenced project. We appreciate your efforts in reviewing the DEIS, and offer the following information in response to your comments.

COMMENT - Page 2, Paragraph 1:

"...the subject project, and the other projects affecting OSC operations that are planned or have received State and/or County zoning approvals will eventually have a very significant adverse impact on OSC."

Response:

If all planned and proposed projects were to be approved and built (which is not certain), the cumulative impact on OSC would indeed be significant. However, the major impacts will result from projects other than the Kapolei Business-Industrial Park. As discussed in the DEIS, Kapolei Business-Industrial Park is consistent with the County’s policy of developing Ewa as the secondary urban center. Kapolei Business-Industrial Park conforms with the preferred sequence for contracting the plantation, which is from the periphery of the plantation inward. Lands at the site of the proposed development are a long trucking distance from the mills, soils are inferior to those of inland fields, and yields are generally lower than the average yields of the plantation.
In the longer term, the site for the proposed development eventually will become isolated from the rest of the plantation as a result of developments which have already been approved, including development of the State's Villages of Kapolei. Consequently, if the project area were to remain part of OSCo, the fields would become "remnant" parts of the plantation and would be fallowed.

COMMENT - Page 2, Paragraph 2:

"The intermediate impact [of all planned and proposed projects, assuming all are approved and built] will reduce OSCo acreage under cultivation to 11,490 acres, which is perilously close to the minimum acreage needed for the plantation to remain economically viable in a single mill configuration (estimated to be about 10,669 acres at 14.06 tons of sugar per year, based on 1987 yield figures, or 11,284 acres based on 1988 yield figures)."

Response:

Typically, yields increase gradually over time, although some years may exhibit a drop in yields. By 1995 when the leases expire (the term for the intermediate impact) yields are expected to exceed 14.5 tons per acre. Corresponding acreage requirements for full production under a one-mill plantation would be less than 10,400 acres.

COMMENT - Page 2, Paragraphs 3 & 4:

"In the long run, the significant impact on OSCo will be that cultivable acreage available to OSCo after full development of the planned and proposed projects (about 7,700 acres) will be far below the minimum acreage needed to remain economically viable in a single-mill operation and much less than the acreage required for the present double-mill configuration."

"...OSCo will be forced to modify its operations and increase the yields from its remaining fields to forestall the inevitable situation when the company finds it no longer economic to remain in operation."

Response:

The comments contained in paragraphs 3 and 4 of page 2 assume that (1) all planned and proposed projects affecting OSCo acreage will be approved and built; (2) sugar prices will remain sufficiently high to justify continued sugar operations at OSCo, with high sugar price-supports surviving (a) competition from newly approved sweaters; (b) negotiations on the General Agreement on Tariffs and Trade wherein the U.S. limitations on sugar imports have been found to violate international trade rules; and (3) major leases for OSCo lands will be renewed, even though economic incentives appear unfavorable to the renewal of some of these leases. Under these improbable conditions, then the urbanization of OSCo lands becomes an increasingly important issue, with the survival of the plantation becoming progressively more difficult. At full development of all planned and proposed projects (if they are approved and built), OSCo would retain about 7,700 acres; Pioneer Mill Company, Ltd. has been able to survive with even less acreage.

It should also be noted that the large reductions in acreage will be from developments other than Kapolei Business-Industrial Park.
COMMENT - Page 2, Paragraph 5:

"...it is evident that the project [Kapolei Business-Industrial] is inconsistent with the objectives, policies and guidelines relating to plantation agriculture in the Hawaii State Plan and the State Agricultural Functional Plan..."

Response

As discussed in the DEIS, Appendix J, Kapolei Business-Industrial Park (1) is not expected to adversely affect the economic viability of O&CO before the major leases expire in the mid-1990s; (2) conforms to the preferred sequence for contracting the plantation; and (3) would not adversely affect the economic viability of O&CO in the longer term since the property will become an isolated remnant of the plantation as a result of other development projects. Thus, Kapolei Business-Industrial Park is consistent with the major thrust of the plantation agriculture portion of the Hawaii State Plan, and the State Agriculture Functional Plan, which calls for preserving the economic viability of plantation agriculture.

COMMENT: Page 3, Paragraphs 1 & 2:

"...it is extremely doubtful that the project would adversely affect the growth of diversified agricultural in Hawaii..." According to the DOA, "This conclusion is based on the supposed relative abundance of arable lands formerly in sugarcane and pineapple cultivation, the supposed availability of these lands for profitable replacement crops, and the supposed very small amount of lands and water required to grow diversified crops."

Regarding the amount of land required for the growth of diversified agriculture, the DOA argues that the optimistic Land Evaluation and Site Assessment (LESA) Commission projections should be used rather than more realistic projections.

Response

In addition to most of the 100,000 acres that have been or will soon be released from sugar and pineapple production since 1968, a portion of the land now in sugarcane is being held awaiting the discovery of profitable replacement activities; this additional land forms part of the supply of prime agricultural land which is available to profitable diversified-agriculture crops, and amounts to over 60,000 acres.

The conclusion in the DEIS that a very small amount of prime-agriculture land and water is required to accommodate the growth of diversified agriculture crops is based on the LESA projections, and not on the more realistic projections discussed in the report. Based on LESA analysis, less than 9,000 acres of prime agricultural land are required per 12-year period. However, land is being released from plantation agriculture at a rate which far exceeds the demand from diversified agriculture. Furthermore, a rapid growth of diversified agriculture would accelerate the release of land from sugar operations since most plantations are searching for profitable replacement crops.
COMMENT: Page 3, Paragraph 2:

"The State should maintain a surplus of [potentially] productive agricultural lands. "Incremental losses of a resource like arable lands, if left uncontrolled, will have a devastating and irreversible cumulative effect on the viability of agriculture, and in particular, Ohau Sugar Company."

Response

As discussed in the DEIS, a very large surplus of prime agricultural land exists and, given the poor economic health of the sugar industry, this surplus is expected to grow. The 145 acres of agricultural land within the area proposed for Kapolei Business-Industrial Park is far too little acreage to adversely affect this large and growing surplus of prime agricultural land.

Again, thank you for taking the time to review and provide comments to the DEIS. The Final EIS will be expanded to reflect these comments. For your information, your letter, together with this response, will be published in the Final EIS.

Sincerely,

[Signature]

WILLIAM E. WANKET

cc: Benjamin B. Lee, Chief Planning Officer
February 26, 1990

Mr. Marvin T. Miura, Ph.D.
Director
Office of Environmental Quality Control
465 South King Street
Room 104
Honolulu, Hawaii 96813

RE: Draft Environmental Impact Statement (DEIS) for Proposed
Raniolei Business-Industrial Park - Meeting with OEQC,
Department of Agriculture, Office of State Planning, The Estate
of James Campbell and Mr. William E. Wanket

Dear Mr. Miura:

Through telephone conversation, with Roy Sakamoto (OEQC), I have advised
your office that several principals from The Estate of James Campbell
will be unavailable to attend the scheduled February 28, 1990 meeting. Due
to the importance of the issue, I feel that it should be rescheduled for
a time when all parties can attend.

I sincerely regret any inconvenience caused by cancellation of this
meeting. I will be contacting your staff at a later date to reschedule
the appointment. Thank you very much for your assistance in this matter.

Sincerely,

WILLIAM E. WANKET

cc: Benjamin B. Lee, Chief Planning Officer
Department of Agriculture
Office of State Planning
March 9, 1990

WILLIAM E. WANKET INC.
Land Use Consultant

Mr. Marvin T. Miura, Ph.D.
Director
Office of Environmental Quality Control
465 South King Street
Room 104
Honolulu, Hawaii 96813

RE: Draft Environmental Impact Statement (DEIS) for Proposed Kapolei Business-Industrial Park - Meeting with OEXC, Department of Agriculture, Office of State Planning, The Estate of James Campbell and Mr. William E. Wanket

Dear Mr. Miura:

Thank you very much for the assistance you have provided, thus far, on the above referenced subject. In my previous communication with you, (February 26, 1990), I mentioned that I would be contacting your staff as soon as a meeting could be rescheduled. I have been informed by the Estate of James Campbell that all parties will be available on Thursday, 15 March 1990 at 11:00 a.m., third floor of Campbell Estate, 828 Fort Street Mall, Honolulu, Hawaii. I again ask your assistance in arranging a meeting between myself, Bruce Plasch (author of the Agricultural Impact Study), Campbell Estate, and representatives from your office, the Department of Agriculture, and the Office of State Planning to discuss the agricultural impacts associated with the proposed Kapolei Business-Industrial Park. Following the meeting, it may be necessary to further respond in writing to the issues raised by the Department of Agriculture.

I regret any inconvenience caused by this short notice. Thank you very much for your assistance in this matter.

Sincerely,

WILLIAM E. WANKET

CC: The Estate of James Campbell
Benjamin B. Lee, Chief Planning Officer
Department of Agriculture
Office of State Planning
Pacific Tower
Suite 660
1001 Bishop Street
Honolulu, HI 96813
Phone
(808) 533-4937
FAX 521-5410
March 23, 1990

Honorable Marvin T. Miura, Ph.D
Director
Office of Environmental Quality Control
465 South King Street
Room 104
Honolulu, Hawaii 96813

RE: Draft Environmental Impact Statement (DEIS) for Proposed
Kapolei Business-Industrial Park - Additional Response to
Comments Received - Meeting with OBDC, Department of Agriculture,
Office of State Planning, the Estate of James Campbell, Mr. Bruce
Plasch, and Mr. William E. Wanket

Dear Mr. Miura:

Thank you very much for your assistance in arranging and also attending
the meeting of March 15, 1990 at the offices of James Campbell on the above
referenced project as it related to the comments received on the agricultur-
al impacts of the proposed development.

At our meeting, representatives from the State clearly expressed their
concerns on the cumulative impacts of projects being planned and proposed
in the region on the agricultural industry. It was pointed out, however,
that the thrust of this concern was not the proposed Kapolei Business-
Industrial Park development.

With reference to the proposed Kapolei Business-Industrial Park, we
appreciated hearing from Paul Schwind that the comments raised by the
Department of Agriculture letter of February 6, 1990 had been satisfactorily
answered by our response letter of February 16, 1990.
Again, we appreciated the opportunity to have met with you and Louise Peterson, Mr. Abe Mitsuda from the Office of State Planning, and Mr. Paul Schwind of the Department of Agriculture. This additional response will be included in the Final EIS.

Sincerely,

WILLIAM E. WANKET

cc:  Benjamin B. Lee, Chief Planning Officer
     The Office of State Planning
     Department of Agriculture
     The Estate of James Campbell
February 9, 1990

The Honorable Benjamin B. Lee  
Chief Planning Officer  
Department of General Planning  
City and County of Honolulu  
650 South King Street  
Honolulu, Hawaii 96813

Dear Mr. Lee:

Subject: Comments on Draft Environmental Impact Statement for  
Kapolei Business-Industrial Park, Ewa, Oahu

We have reviewed the draft Environmental Impact Statement (EIS) for the  
proposed 552.01-acre Kapolei Business-Industrial Park to be situated between  
Barbers Point Harbor and the Campbell Industrial Park. The following comments  
are provided for your consideration.

According to the Land Use Commission, the project site apparently is in  
the Agricultural District and will require a land use district boundary  
amendment to the Urban District. With this in mind, may we point out the need  
for additional information in several areas. In general, while raw data is  
provided on employment, water needs, wastewater, and other subjects, the draft  
EIS fails to seriously address some real issues that the project will  
encounter. The final EIS should provide discussions on: the effect of the  
availability of labor on the project's capability to provide the number of  
jobs projected; the nature of the proposed project's dependence on other  
activities/developments in the region; the availability of water for the  
project and other projects already approved and proposed for the region; the  
availability of sufficient capacity for wastewater disposal at the Honomuli  
Wastewater Treatment Plant to accommodate the project and other projects in  
the region within the project's timeframe.

In addition, we are aware of the recent correspondence from the  
Department of Agriculture and the Natural Area Reserves System Commission  
about the subject proposal and are similarly concerned about the information  
on those topics provided in the draft EIS.
In view of the regional impacts that the proposed project is expected to generate, a sincere effort should be made to address these concerns wherever possible.

Sincerely,

[Signature]

Harold S. Masumoto

cc: The Honorable Yukio Kitagawa, DOA
Mr. M. Lee Goff, NARS
March 27, 1990

WILLIAM E.
WANKET INC.
Land Use Consultant

The Honorable Harold S. Masumoto
Office of the Governor
Office of State Planning
State Capitol
Honolulu, Hawaii 96813

RE: Draft Environmental Impact Statement (DEIS) for Proposed Kapolei Business-Industrial Park – Response to Comments Received

Dear Mr. Masumoto:

Thank you very much for the copy of your letter of February 9, 1990 to the Department of General Planning concerning the referenced project. We agree, as you stated, that the project site is currently in the Agricultural District and will require a land use district boundary amendment to Urban District. Regarding your request for additional information on "the effect of the availability of labor on the project's capability to provide the number of jobs projected; the nature of the proposed project's dependence on other activities/developments in the region..." a letter addressed to me, prepared by John Zapotocky, Consultant, is attached. The response has been coordinated with Mr. Abe Mitsuda of your office. We appreciate your efforts in reviewing the DEIS, and offer the following summary of the enclosed response and additional information in response to your comments.

COMMENT: The effect of the availability of labor on the project's capability to provide the number of jobs projected.

RESPONSE: The consultant's response (enclosed) provides that labor availability in the Ewa area is excellent now, and that the situation should continue for the foreseeable future, as most of the new housing planned for Oahu during the next 20 years will be in the Ewa, Central Oahu and Waianae areas. While the labor market may tighten on an Oahu-wide basis, factors exist to mitigate this tightening effect. The proposed development is located in an area where there is a surplus of workers compared to jobs and, therefore, the potential islandwide labor shortage will not prevent the development from achieving its projected employment levels.

Pacific Tower
Suit 660
1001 Bishop Street
Honolulu, HI 96813
Phone
(808) 533-4037
FAX 521-8410
COMMENT: The nature of the proposed project's dependence on other activities/developments in the region.

RESPONSE:

The proposed development is supportive of and linked to the region's second city concept. However, demand for the Kapolei Business-Industrial Park is primarily generated by long term growth in Oahu's demand for industrial land and competition from higher (commercial/residential) land uses in areas such as Kakaako, Iwilei and the Airport that contain a high proportion of industrial uses. Thus, the proposed development while somewhat sensitive to regional growth factors, is primarily responsive to islandwide demand for industrial land and, therefore, only dependent on the success of other regional development to a limited degree. The consultant concludes that no significant negative impacts will be created by the proposed project.

COMMENT: The availability of water for the project and other projects already approved and proposed for the region.

RESPONSE:

Regarding the availability of water for the subject project and others in the area, the Estate of James Campbell is a member of the Eva Plains Water Development Corporation (EPWDC) which is coordinating the water requirements for the developments in the Eva region. Six potable water wells have been developed in upper Honouliuli by the EPWDC. These wells will supply approximately 6.7 million gallons per day (mgd) of potable water for the initial phases of the developments in the Eva area. The Estate will share in the allocation of 6.7 million gallons. Other sources of water are currently being investigated to accommodate all the projects planned for the area.

The State's demonstration desalinization plant is currently planned to produce 1 million gallons of water which will be used for Campbell Estate projects. The plant may be expanded to process up to 10 mgd or more of water which would be added to the potable water supply.

In addition to the State's desalinization plant, the Estate is also investigating the possibility of utilizing the waste heat from a coal burning power plant for desalinization of nonpotable water. The proposed power plant is being planned by AES and would be located in the existing James Campbell Industrial Park.

COMMENT: Availability of sufficient capacity for wastewater disposal at the Honolulu Wastewater Treatment Plant to accommodate the project and other projects in the region within the project's timeframe.
RESPONSE:

The Honolulu Wastewater Treatment Plant (MWTP) is currently at or very near capacity. Expansion of the plant from 25 mgd to 38 mgd is currently being designed and is tentatively scheduled to be completed by 1994. Should the proposed project proceed the expansion of the treatment plant, the wastewater generated from the development will be collected by the on-site collection system and transported to a temporary wastewater treatment facility. The temporary treatment facility would be located within the boundaries of the development and would be operated privately until connection to the Honolulu MWTP could be made. Discussions are underway with the Department of Health regarding the project's wastewater disposal needs.

COMMENT: Correspondence from Department of Agriculture and Natural Area Reserves System Commission

RESPONSE: Department of Agriculture Correspondence

On March 15, 1990 a meeting was held at the offices of Campbell Estate, arranged to discuss the comments offered by the Department of Agriculture on the above-referenced project. In attendance was Mr. Abe Mitsuda, your office, Mr. Marvin Miura and Louise Peterson, OEQC, Mr. Paul Schwind, Department of Agriculture and others (reference my March 23, 1990 to OEQC, with copy to your office). At our meeting representatives from the State clearly expressed their concerns on the cumulative impacts of projects being planned and proposed in the region on the agricultural industry. It was pointed out, however, that the thrust of this concern was not the proposed Kapolei Business-Industrial Park development.

We appreciated hearing from Paul Schwind that the comments raised by the Department of Agriculture letter of February 6, 1990 had been satisfactorily answered by our response letter of February 16, 1990.

Natural Area Reserves System Commission (NARSC) Correspondence

By letter dated March 23, 1990, we responded as follows:

"In consideration of its acknowledged archaeological importance, Campbell Estate will install a fence enclosing the Malakole Sinkhole area, similar to the present enclosure around Sinkhole B6-22. This enclosure will enable the site to be accessible for future research, as well as site visitations by the archaeological community and interested segments of the public, while protecting the resources from vandalism and/or destruction from unauthorized entry.

Furthermore, the Estate will explore the possibility of securing the sinkhole area for a period of five (5) years to allow study and removal of artifacts, or for the site to be acquired by qualified
parties for conservation use. With reference to your suggestion that 
'...all necessary steps be taken to assure the integrity of this 
parcel [including]...a redesignation of this parcel to conservation 
usage... we attach for your information a copy of the Honolulu City 
Council's Resolution 88-476 (adopted January 11, 1989) requesting 
the Hawaii State Legislature to allocate funds to the State Department 
of Land and Natural Resources (DLNR)...to acquire land for an 
Archaeological Park containing representative samples of sinkholes."

Thank you again for your comments. Your letter, together with this response 
we included in the FEIS.

Sincerely,

WILLIAM E. WANKET

cc: Benjamin B. Lee

Encl (1)
March 26, 1990

Mr. William E. Wanket  
Pacific Tower, Suite 660  
1001 Bishop Street  
Honolulu, Hawaii 96813

Dear Wanket:

Subj: Response to Office of State Planning Comments  
DEIS re. Kapolei Business-Industrial Park  
Dated February 9, 1990

Thank you for the opportunity to respond the following comments raised in the above referenced letter:

Requested Discussion

Point 1.  
THE EFFECT OF THE AVAILABILITY OF LABOR ON THE PROJECT'S CAPABILITY TO PROVIDE THE NUMBER OF JOBS PROJECTED

Response to Point 1

The market assessment prepared for the subject EIS estimated job creation but did not specifically address the question of the availability of the labor force, however, the consultant believes that labor availability will not be critical to the job creation potential of the proposed project given the following factors:

1. State Job Projection - Basis for Market Assessment  
Assumptions used to Project Project Job Generation

The demand estimates for industrial land contained in the market assessment were actually driven by the estimated number of industrial jobs between 1990 and 2010. The source of these estimates was the Department of Business and Economic Development’s publication “Population and Economic

The total demand for new industrial land was supplemented by the consultants’ estimate of reduced industrial land supplies due to conversion of industrial land in IMX (Industrial Mixed Use) areas to commercial uses. In addition, additional demand was estimated to bring the vacancy rates to more acceptable levels.

Once this overall demand was estimated a portion of the demand was allocated to the Ewa area based on a number of factors including land availability, population growth, etc.

Job growth was then allocated back to the specific development by using job per acre factors developed in the comprehensive study “Development Plan Land Use Analysis” by the Department of General Planning, City and County of Honolulu, April 1980.

Thus the total number of jobs forecast by the consultant are included with the official state planning assumptions (Series M-K) approved for state, city and private planning purposes. According to the staff of the State Data Center as of March 1990 no changes had been made to the (Series M-K) projections.

2. General Discussion - Current Situation - Labor Availability

A recent article, “New Promise in Hawaii’s Job Market” from the September/October 1989 issue of Bank of Hawaii’s Bi-Monthly publication Business Trends provides an interesting analysis of the existing situation in Hawaii’s labor market. Among the conclusions of the article are: the current low level of unemployment throughout the state is the subject of undue concern; much of the job creation recently is due to the unprecedented level of foreign investment in Hawaii’s business enterprises; that existing employees are being forced to compete for and utilize employees effectively and productively; and that this situation is forcing gains in productivity and income for Hawaii’s labor force. The article in its entirety is reprinted below:

3. Potential Sources of Additional Labor

While the previous article stressed the benefits of the tight labor market on productivity and income for the
Mr. William E. Inket
March 26, 1990
Page 3

working man it did not enumerate the potential increases in labor availability encouraged by rising incomes. Basic economic theory postulates that low unemployment will make the labor component of economic equations more scarce and therefore bid up its price. Assuming that we lived in a perfect economic world low unemployment rates would result in workers from areas of high unemployment migrating to areas of low unemployment and indeed this actually happens. In a less than perfect world and particularly in Hawaii where a number of factors including; distance; high living costs; lack of housing and a lack of perfect information only a relatively small number of jobs will be filled by immigrants. Increased wage levels and a higher value placed on labor is likely to attract labor from existing resources within the state. The following are examples of potential increases in labor supply:

a. Higher Wages

Higher wages are a powerful incentive for persons who are undecided about joining the labor force.

b. Increased and More Attractive Benefits

A number of employers are offering an increasingly lucrative and increased variety of benefits. These range from traditional ones including medical, dental, and retirement to more recent innovations such as child care, elder care and company paid legal and exercise plans.

c. Targeting Non-Traditional Sources of Employees

A number of employers are targeting groups not traditionally recruited as employees including: the elderly; housewives and students.

d. Making Work More Convenient for Employees

A number employers offer flex-time and job sharing to meet employee need.

e. Technological Advances

A number of employees are able to work out of their homes or at more convenient locations due to computer and communication advances. The State Department of Transportation's Telework Center at Mililani Technology Park is a good example of what can be done.
f. Employment at more than one job.

Many employees hold more than one job. Increased wages and more flexible scheduling may attract additional labor sources.

As labor becomes more dear and competition increases for the labor input, aggressive recruiting, higher wages, and more attractive working conditions and environments are likely to increase the labor resources available.

4. Specific Attractiveness of the Kapolei Business Industrial Park

a. Parking

One of the major irritants in working in the various industrial areas in Honolulu is inadequate parking. Many areas including Kakaako, Airport Industrial Park, Shafter Flats and others have inadequate parking. Often no parking is available on site, on street parking is limited and taken up by commercial vehicles and no offstreet parking is available within walking distance.

The James Campbell Industrial Park and the proposed Kapolei Business Industrial Park are examples of industrial areas which take parking into consideration.

b. Easy Access to Population Centers

The bulk of the growth on Oahu in population and housing is projected to be in the Ewa, Waianae and Central Oahu areas. The propose Kapolei Business Industrial Park is located in the center of this growth area. Projections developed by the Department of General Planning County Information Branch, 1989 indicate that by 2010, 28% of the housing units and 31% of the population will live in these three areas. Between 1991 and 2010 59% of the new housing units will be constructed in the Ewa, Central Oahu and Waianae areas. Work locations within these development plan areas are expected to attract employees who would otherwise have to fight traffic which by 2010 is expected to the worse than it is today on the Pearl City corridor.

c. Availability of Housing
As discussed in b. above and in more detail in point 2 below, the Ewa, Central Oahu and Waimanalo areas generally and the Ewa area in particular will provide for an abundance of housing in all price ranges. In addition, both the state and city have chosen to concentrate their long range efforts to provide "affordable housing" in the Ewa development plan area, the state at Kapolei and the city at West Loch, and other Ewa sites. It seems clear that the Ewa area will suffer least from any potential housing shortage for employees. In fact, given the relatively low current ratio of jobs to residents in the Ewa area, there appears to be an oversupply of potential employees located in the Ewa area currently and this situation is likely to continue over the next twenty years.

Point 2.
THE NATURE OF THE PROPOSED PROJECT'S DEPENDENCE ON OTHER ACTIVITIES/DEVELOPMENTS IN THE REGION

The proposed Kapolei Business Industrial Park (KBIP) is dependent on the other activities and developments in the region to a certain extent, however, as the primary purpose of the development will be to meet the islandwide demand for additional industrial land. Secondarily, the proposed KBIP in an integral (job providing) element of the "second city" concept supported by state and city policy.

The attached Figure 1 (1) shows a graphic depiction of the relationship between population and employment in the years 1980 and 2000 for the various development plan areas. Figure 2 (1) shows a graphic depiction of the major weekday travel corridors. While trip generation and traffic measurements are extremely technical and complex it is commonly accepted that the major cause of congestion during the most popular commute times is that the Primary Urban Center contains the bulk of Oahu's employment opportunities while the other development plan areas are primarily residential centers with limited employment opportunities.

More specifically based on information provided by OMMPO (2), the Primary Urban Center (PUC) provided 1 job for each 1.31 PUC residents in 1985, while the Central Oahu (CO), Ewa (E) and Waimanalo (W) DP areas provided 1 job per 2.69, 3.39 and 4.71 residents respectively in 1985. By the year 2005 it is estimated that the PUC, CO, E, W areas will provide 1 job per 1.26, 2.14, 1.73, and 3.86 residents respectively. In other words there is a tremendous disparity in the location of population and employment by development plan area and by
inference, there is a tremendous disparity in the location of jobs and employees.

The Kapolei/Ewa Project which includes the proposed Kapolei Business Industrial Park incorporates a number of existing elements as well as planned elements into an integrated whole known as the "second city" and environs. Long range plans for the "second city" incorporate a number of elements which must interact to insure the success of the "second city" concept. (It should be noted that the present government approved plans for the development of the "second city" follows closely the master plan developed by planners for the Estate of James Campbell. Thus the location of the various elements has been carefully studied by both professional planning consultants and reviewed by the appropriate governmental agencies to insure that each element is supportive of the whole while at the same time has a positive relationship with adjacent elements of the plan.) The following is a summary of the existing and planned development in the Ewa Development Plan area.

Residential Development

The Department of General Planning estimates that by the end of 1990 the Ewa DP area will have 12,400 housing units and a population of 40,200. By 2010, DGP estimates 44,100 housing units and a population of 130,000 persons could be living in the Ewa DP area.

Existing Residential Development

The older existing communities of Ewa Beach and Makakilo and the military communities of Barbers Point and Iroquois Point make up the bulk of the existing population. Major residential development has started at Ewa by Gentry where over 800 units are occupied.

Planned Residential Development

Major residential development in the Ewa area has started in earnest with the following projects:

Continuing/New Underway

<table>
<thead>
<tr>
<th>Existing</th>
<th>Underway</th>
<th>Planned</th>
</tr>
</thead>
<tbody>
<tr>
<td>VARIOUS</td>
<td></td>
<td>8,300</td>
</tr>
<tr>
<td>Project Name</td>
<td>1980</td>
<td>1990</td>
</tr>
<tr>
<td>---------------------</td>
<td>------</td>
<td>------</td>
</tr>
<tr>
<td>Makakilo</td>
<td>3,000</td>
<td>2,800</td>
</tr>
<tr>
<td>Ewa Marina</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ewa by Gentry</td>
<td>800</td>
<td></td>
</tr>
<tr>
<td>Villages at Kapolei</td>
<td></td>
<td></td>
</tr>
<tr>
<td>West Loch Estates</td>
<td>300</td>
<td></td>
</tr>
<tr>
<td>Kapolei Knolls</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Makaiwa Hills</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ko Olina</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>12,400</td>
<td>15,350</td>
</tr>
</tbody>
</table>

In addition to the above described projects there will be residential units in Kapolei City proper and both the state and city in the long run plan additional projects in the Ewa area. Thus over the immediate, medium and long-term future an abundance of housing in the Ewa area in all price ranges is expected to be developed.

(1) Wilber Smith and Associates "HALI 2000 Alternatives Analysis Study for the Oahu Long-Range Transportation Plan Update" June 1984 (Prepared for the Oahu Metropolitan Planning Organization)

(2) Unpublished information collected for OMPD for update of "HALI 2000 Study" tentatively named "HALI 2005 Study". Information provided by Laureen Brennan of OMPD staff 3/13/90.

**Commercial Developments**

In addition to the Kapolei Business Industrial Park which is the subject of this discussion, a wide variety of commercial developments are proposed as part of the Kapolei/Ewa master plan including:

**City of Kapolei**

A 935 acre master planned urban center including an "urban core" with office, commercial and governmental centers. The
centerpiece of the city will be the 73 acre Kapolei Regional Park.

James Campbell Industrial Park

The 1,367 acre park begun in 1959 is nearing completion with only a few sites uncommitted as of this date. The park employs more than 3,000 persons and is expected to remain Oahu’s primary industrial center for the foreseeable future.

Barbers Point Harbor

Oahu’s second major commercial harbor is expected to open in 1990 with the completion of the first increment of shoreside facilities to be completed this year.

Saint Francis Medical Center

This facility opened in 1989 and is expected to provide high level medical services to the Ewa region.

Destination Resort/Recreation

Ko Olina

Over $200,000,000 has been invested in infrastructure for the Ko Olina project to date. A total of 4,000 resort units, two major commercial developments, two golf courses and a marina are planned.

Ewa Marina

The new master plan for the development includes 1,500 resort units, a marina and a 27 hole golf facility as well as a community scale commercial facility.

Paradise Cove

Over 200,000 persons annually are entertained at this attraction which host luuas as well as other events.

Hawaii Prince Golf Course

This free standing 27 hole golf course is programmed for development in the near future.

Additional Golf Courses
Many of the planned residential communities including, West Loch, Ewa by Gentry, The Villages at Kapolei have golf facilities as an integral part of the community plan. Other freestanding golf facilities are proposed for the Ewa area.

As can be seen the residential, resort, commercial and recreational elements planned in the Ewa area are all supportive of the "second city concept" and are supportive of each other. While all of the elements are supportive, most elements obtain their primary marketing impetus from countywide projected demand, i.e., housing, resort and industrial demand. Thus, while the "second city" concept requires a certain "critical mass" in order to be successful the bulk of the elements necessary to create that "critical mass" are being driven by countywide demand for the individual elements.

This is particularly true of the proposed Kapolei Business Industrial Park. As demonstrated by the James Campbell Industrial Park, it is possible to attract businesses to the Ewa plain in the absence of the elements necessary for the success of the "second city" concept. Thus the Kapolei Business Industrial Park is needed to assure an adequate supply of industrial land be available for future growth and expansion of Oahu's industrial base. The basic demand for the Kapolei Business Industrial Park will exist in the absence of a total success of other regional developments. Success of the other regional growth leading to the critical mass necessary for the "second city" will enhance the demand for the Kapolei Business and Industrial Park.

Summary and Conclusion

The preceding discussion indicates that labor availability in the Ewa area is excellent now, and should continue to be so for the foreseeable future, given that most of the new housing planned for Oahu during the next 20 years will be in the Ewa, Central Oahu and Waianae areas. Thus, while the labor market may tighten on an Oahu wide basis many factors will tend to mitigate this tightening. The proposed development is located in an area where there is a surplus of workers compared to jobs and therefore the potential islandwide labor shortage will not prevent the development from achieving its projected employment levels.

The proposed project is supportive of and linked to the region's second city concept. However, demand for the
Kapolei Business Industrial Park is fueled primarily by long term growth in Oahu's demand for industrial land as well as the competition by higher (commercial/residential) land uses in areas in transition which currently contain a high proportion of industrial uses such as Kakaako, Iwilei and the Airport. Thus, the proposed development while somewhat sensitive to regional growth factors, it is primarily responsive to islandwide demand for industrial land and therefore only dependent on the success of other regional development to a limited degree.

The consultant concludes, with regard to those comments addressed above, no significant negative impacts will be created by the proposed project.

The consultant shared a draft of the above discussion with the OSP staff on 3/23/90. The staff indicated that the preceding discussion adequately addressed the two comments raised in the 2/9/90 OSP letter.

Sincerely,

[Signature]

John Zapolsky
CITY COMMENT LETTERS
AND
APPLICANT RESPONSES
January 22, 1990

Director
Department of General Planning
City and County of Honolulu
650 South King Street, 8th Floor
Honolulu, Hawaii 96813

Dear Sir:

Subject: Draft Environmental Impact Statement (DEIS) – Kapolei Business-Industrial Park, Ewa, Oahu

The above-mentioned document has been reviewed as requested by the Office of Environmental Quality Control, State of Hawaii.

The Soil Conservation Service does not support the conversion of prime agricultural land to other uses.

Sincerely,

Warren M. Lee
State Conservationist

Cc: The Estate of James Campbell, c/o William E. Wanket, Inc., Pacific Tower, Suite 660, 1001 Bishop Street, Honolulu, Hawaii 96813
    Marvin T. Hiura, Ph.D., Director, Office of Environmental Quality Control, 465 South King Street, Room 104, Honolulu, Hawaii 96813
January 30, 1990

Mr. Warren M. Lee
State Conservationist
U.S. Department of Agriculture
Soil Conservation Service
P.O. Box 50004
Honolulu, Hawaii 96850

RE: Draft Environmental Impact Statement (DEIS) for Proposed Kapolei Business-Industrial Park - Response to Comments Received

Dear Mr. Lee:

Thank you very much for the copy of your letter of January 22, 1990 to the Department of General Planning regarding the referenced project. We appreciate your efforts in reviewing the DEIS.

Your objection to the conversion of prime agricultural land to other uses is noted. However, of the 552 acres being proposed for development, the various soil surveys used in Hawaii indicate that approximately 85 percent of the project area is comprised of soils that are poorly suited for agriculture, since much of the land is coral outcrop. The remaining 15 percent of the project area is comprised of soils that are considered to be of good, but not high quality.

Furthermore, it is important to realize that under certain conditions a development, even if it is on prime agricultural lands, can provide substantial benefits to a community which override existing or potential benefits from an agricultural use of the land.

For your information, your letter, together with this response, will be published in the Final EIS.

Sincerely,

[Signature]

WILLIAM E. WANKET

cc: Benjamin B. Lee, Chief Planning Officer
United States Department of the Interior  
FISH AND WILDLIFE SERVICE  
PACIFIC ISLANDS OFFICE  
P.O. BOX 50147  
HONOLULU, HAWAII 96850  

January 11, 1990

Mr. Benjamin B. Lee  
Chief Planning Officer  
Department of General Planning  
City & County of Honolulu  
650 South King Street  
Honolulu, Hawaii 96813  

Re: Kapolei Business-Industrial Park, Ewa, Oahu

Dear Mr. Lee:

The U.S. Fish and Wildlife Service (Service) has reviewed the Draft Environmental Impact Statement for the referenced project and offers the following comments for your consideration. To the best of our knowledge, no listed or proposed endangered species within our jurisdiction occur in the proposed project area. The project site does not provide significant habitat for migratory birds. However, due to current manpower and budget restrictions, the Pacific Islands Office cannot devote the time necessary to conduct a thorough review of fish and wildlife concerns associated with the referenced action at this time.

Please be advised that this notification does not represent Service approval of the proposed activity. The Service may review future actions related to this proposal should administrative constraints be alleviated or if adverse impacts to significant fish and wildlife resources are identified. Please continue to keep our office apprised of the project’s status.

Sincerely,

[Signature]

Ernest Kosaka  
Field Office Supervisor  
Pacific Islands Office

cc: William E. Hankey, Inc.  
Office of Environmental Quality Control
January 18, 1990

Mr. Ernest Kosaka
Field Office Supervisor
United States Department of the Interior
Fish and Wildlife Service
Pacific Islands Office
P.O. Box 50167
Honolulu, Hawaii 96850

RE: Draft Environmental Impact Statement (DEIS) for Proposed Kapolei Business-Industrial Park - Response to Comments Received

Dear Mr. Kosaka:

Thank you very much for the copy of your January 11, 1990 letter to Mr. Benjamin B. Lee, Chief Planning Officer of the Department of General Planning regarding the DEIS for the referenced project. We appreciate your efforts in reviewing the DEIS.

For your information, a copy of the DEIS has been provided to the State Department of Land and Natural Resources for review and comment. As the project progresses through the various governmental approval processes, additional opportunities will be available for you to make comments on the project.

Again, thank you for your comments. Your letter, together with this response, will be published in the Final EIS.

Sincerely,

WILLIAM E. WANKET

cc: Benjamin B. Lee, Chief Planning Officer
February 5, 1990

Mr. W. K. Liu
Assistant Base Civil Engineer
Department of the Navy
Commander Naval Base
Box 110
Pearl Harbor, Hawaii 96869-5020

RE: Draft Environmental Impact Statement (DEIS) for Proposed Kapolei Business-Industrial Park - Response to Comments Received

Dear Mr. Liu:

Thank you very much for the copy of your letter of February 1, 1990 to the Department of General Planning regarding the referenced project. We appreciate your efforts in reviewing the DEIS, and your comment that concerns expressed had been accurately stated.

For your information, your letter, together with this response, will be published in the Final EIS.

Sincerely,

WILLIAM E. WANKET

cc: Benjamin B. Lee, Chief Planning Officer
Subj: REQUEST TO AMEND THE EWA DEVELOPMENT PLAN LAND USE MAP IN THE 1989 ANNUAL REVIEW

that could increase the noise exposure in this area in the future. Accordingly, detailed plans for development should candidly appraise not only the existing noise environment and its actual impact on individual uses under consideration, but also the possibility of change.

The Navy's point of contact is Mr. Bill Liu at 471-3324. Thank you for the opportunity to comment on the proposed Ewa Development Plan Land Use Map amendment.

Sincerely,

D. J. NASH
Captain, CEC, U.S. Navy
Duty Civil Engineer
By direction of
the Commander

Encl:
(1) Imaginary Surfaces
(2) 1989 AICUZ Map
Mr. Benjamin B. Lee  
Chief Planning Officer  
City and County of Honolulu  
Department of General Planning  
650 South King Street  
Honolulu, HI 96813

Dear Mr. Lee:

DRAFT ENVIRONMENTAL IMPACT STATEMENT FOR KAPOLEI BUSINESS-INDUSTRIAL PARK

We have reviewed the Draft Environmental Impact Statement (DEIS) for Kapolei Business-Industrial Park which was sent to us by the State of Hawaii Office of Environmental Quality Control and found that our concerns have been accurately stated. The Navy has no further comments to add to those in the enclosed letter which was provided to William E. Wanket, Inc. in response to the Environmental Impact Statement Preparation Notice.

A copy of the Final EIS is requested when published.

Thank you for the opportunity to review the DEIS. Should you have any questions, the Navy’s point of contact is Mr. Bill Liu, telephone 471-3324.

Sincerely,

Bill Liu  
Assistant S/O, Civ. Engineer  
By direction of the Commander

Encl:  
COMNAVBASE 1tr 11000 Ser 03(2021B)/2786 of 15 Nov 89

Copy to:  
The Estate of James Campbell  
c/o William E. Wanket, Inc.

Marvin T. Miura, Ph.D.  
Director  
Office of Environmental Quality Control
DEPARTMENT OF THE NAVY
COMMANDER
NAVAL BASE PEARL HARBOR
BOX 110
PEARL HARBOR, HAWAII 96860-5020

Mr. William E. Wanket
William E. Wanket, Inc.
Pacific Tower, Suite 1010
1001 Bishop Street
Honolulu, HI 96813

Dear Mr. Wanket:

REQUEST TO AMEND THE EWA DEVELOPMENT PLAN LAND USE MAP
IN THE 1989 ANNUAL REVIEW

In response to your letters of September 23 and October 20, 1989, we have reviewed the proposed Ewa Development Plan Land Use Map amendment to change the land use designation of approximately 552.1 acres of property from Agriculture to Industrial and Commercial. Based on the proposed land uses for the property and its location, we are providing the following comments:

AIRFIELD CLEARANCE - The proposed map amendment site is adjacent to Naval Air Station (NAS) Barbers Point and is within an area where tall structures, such as towers could be a hazard to aircraft operations.

Enclosure (1) shows the map amendment site in relation to the Federal Aviation Regulations safety height criteria represented by imaginary surfaces through which objects around the airfield should not penetrate. The property is located under the 50:1 approach surface, the 7:1 transitional surface, the inner horizontal surface, and the 20:1 conical surface areas. The most restrictive of these surfaces is the 50:1 approach surface area where the top of structures should not exceed the sloping surface, which is approximately 89 feet in elevation (mean sea level datum) at a location about 3,000 feet from the end of Runway 11-29 (eastern end of project site). The Navy therefore requests that no structures which exceed 89 feet in height be permitted in the subject property.

NOISE - Enclosure (2) shows the map amendment site in relation to the recently completed Air Installations Compatible Use Zones (AICUZ) noise footprint for NAS Barbers Point. The proposed industrial area is located outside the 65 Ldn noise contours and the proposed commercial area is located outside the 55 Ldn noise contours. The proposed land use change presents no incompatibility with the Navy's AICUZ land use guidelines for NAS Barbers Point based on recent and foreseeable future aircraft operations.

However, it should be noted that the property is located under flight tracks of aircraft operating at this military airfield. Also, the AICUZ noise contours were developed based on current and known forthcoming changes to air operations at the Station. Military necessity may dictate future unforeseen changes in the types of aircraft supported, the tempo of operations, or the time of day during which those operations are conducted,

ENCLOSURE (1)
DEPARTMENT OF THE ARMY
U. S. ARMY ENGINEER DISTRICT, HONOLULU
BUILDING 230
FT. SHAFTER, HAWAII 96859-5440

January 19, 1990

REPLY TO ATTENTION OF:
Planning Branch

Mr. Ben Lee
Chief Planning Officer
Department of General Planning
City and County of Honolulu
650 South King Street, 8th Floor
Honolulu, Hawaii 96813

Dear Mr. Lee:

We have reviewed the Draft Environmental Impact Statement for the proposed Kapolei Business-Industrial Park, Ewa, Oahu. Our previous comments in response to the Preparation Notice (letter dated November 17, 1989) have been included in the document. We have no additional comments.

Sincerely,

Kisuk Cheung
Chief, Engineering Division

Copy Furnished:

✓ The Estate of James Campbell
c/o William E. Wanket, Inc.
Pacific Tower, Suite 660
1081 Bishop Street
Honolulu, Hawaii 96813

Marvin T. Miura, Ph.D.
Director
Office of Environmental Quality Control
465 South King Street, Room 104
Honolulu, Hawaii 96813
January 24, 1990

Mr. Kisuk Cheung  
Chief, Engineering Division  
Department of the Army  
U.S. Army Engineer District, Honolulu  
Building 230  
Ft Shafter, Hawaii 96858-5440  

RE: Draft Environmental Impact Statement (DEIS) for Proposed  
Kapolei Business-Industrial Park – Respond to Comments Received  

Dear Mr. Cheung:

Thank you very much for the copy of your letter of January 19, 1990 to the Department of General Planning regarding the referenced project. We appreciate your efforts in reviewing the DEIS.

For your information, your letter, together with this response, will be published in the Final EIS.

Sincerely,

WILLIAM E. WANKET

cc: Benjamin B. Lee, Chief Planning Officer
FEDERAL COMMENT LETTERS
AND
APPLICANT RESPONSES
March 8, 1990

Mr. Walter M. Ozawa
Director
Department of Parks and Recreation
650 South King Street
Honolulu, Hawaii 96813

RE: Draft Environmental Impact Statement (DEIS) for the Proposed Kapolei Business-Industrial Park - Response to Comments Received

Dear Mr. Ozawa:

Thank you very much for the copy of your letter of January 11, 1990 to the Department of General Planning regarding the referenced project. We appreciate your efforts in reviewing the DEIS. Information in response to your comments is provided.

Need for additional industrial zoned land

The market assessment recognizes the existence of substantial amounts of undeveloped industrial land within the James Campbell Industrial Park (JCIP) and mauka of Hawaii Raceway Park. The market assessment indicates that much of the existing undeveloped land within JCIP is being held for expansion by lessees or has already been committed for development. The Estate of James Campbell is currently planning the development of a portion of the undeveloped land mauka of Hawaii Raceway Park.

The application for development plan amendment of the remaining lands within the proposed Kapolei Business Industrial Park is in response to the market demand projected through the year 2010. This twenty-year planning period is recognized by both state planners (Department of Business and Economic Development Long Range Economic Projections Series M-K 1985-2010) and county planners (in the development plan process) as a reasonable time horizon for long range planning.
Oahu Motor Sports Facility

According to your study (Report on an Oahu Motor Sports Facility, November 1989), three sites were identified as potentially suitable for development of a motor sports facility. Additionally, the study states "...[F]urther study is needed to determine if even these three sites are appropriate for a commercially viable motor sports facility. If it develops that none of these sites is publicly acceptable, then the only other options are no Oahu motor sports facility or else a publicly-subsidized "user only" facility in a remote part of rural Oahu."

With reference to the existing Raceway Park site, it is true that the site is "grandfathered." However, should the improvements as suggested in your report be implemented, its "grandfather" status may no longer apply. In terms of an allowed use under the Land Use Ordinance, automotive racing is only permitted in the B-1, B-2, NMX-4 and IMX-1 districts, and only with the approval of a TYPE-2 CUP.

Again, thank you for taking the time to comment on the DEIS. For your information, your letter, together with this response, will be published in the final EIS.

Sincerely,

WILLIAM E. WANKET

cc: Benjamin B. Lee, Chief Planning Officer
This section should reflect that recent DGP recommendations on Commercial-Industrial mixed use areas have been based on the low supply of Industrial land and the loss of Industrial land to Commercial uses in Commercial-Industrial mixed use areas, rather than its applicability outside the Primary Urban Center. The discussion should reflect that the DP provides for the location of mixed use areas outside the Primary Urban Center in Ewa and Central Oahu.

9. On page 85, under traffic impacts, the DEIS indicates that drivers from minor streets will experience extreme delays (Level of Service F) crossing or making left turns onto Kalaheo Boulevard and the future second access road during peak hours if the intersections are signalized. The DEIS Traffic Assessment seems to indicate otherwise. You may wish to clarify or discuss this further.

If you have any questions, contact Randy Hara at 523-4483.

Sincerely,

[Signature]

BENJAMIN B. LEE
Chief Planning Officer

BBL: js
cc: OEQC
April 3, 1990

Mr. Benjamin B. Lee
Chief Planning Officer
Department of General Planning
Municipal Building, 8th Floor
650 South King Street
Honolulu, Hawaii 96813

RE: Draft Environmental Impact Statement (DEIS) for Proposed Kapolei Business-Industrial Park - Response to Comments Received

Dear Mr. Lee:

Thank you very much for your letter of January 19, 1990. We appreciate your efforts in reviewing the DEIS. Information in response to your comments is provided:

Project Acreage

The 552.1 acres mentioned in the text is the accurate acreage rounded off to the nearest tenth. The maps will be changed to reflect this area size.

HECO Designation and Easements

We have no objections to the HECO substation site being designated under the DP Land Use Category of Public and Quasi-Public use. It was initially included under the DP Land Use Category of Industrial Use since the site will probably be rezoned in the future to an Industrial District similar to other portions of the project area. Currently, the Land Use Ordinance (LZO) does not have a specific zoning district for "Quasi-Public uses", and it would seem inappropriate to retain the present AG-1 Restricted Agriculture zoning district on the site.

The Power and Communications section of the Preliminary Engineering Report will be expanded to describe and locate the existing HECO easements.
The existing HECO easements have relocation clauses in the agreements with Campbell Estate. It is intended that the powerlines will ultimately be located within the project's roadways, eliminating the need for existing and future easements. Should electrical easements be required outside of the roadways, locations of the easements will be coordinated with Hawaiian Electric.

Slag Area

Your comments on the slag area were referred to McCutchen, Doyle, Brown and Enersen, attorneys for Campbell Estate on this matter. Their response follows:

"...First, Mr. Lee's letter pointed out that the Draft Environmental Impact Statement states on page 57 that a 6-acre area has been used to store approximately 130,000 tons of slag by Hawaiian Western Steel and "baghouse dust" containing lead and cadmium. Based on data gathered by Harding Lawson Associates ("HLA"), environmental consultants to Hawaiian Western Steel ("HWS"), this statement is not correct. According to HLA, there are approximately 43,500 tons of material covering approximately 4.5 acres in the northern portion of the Campbell Industrial Park. The materials placed in the waste pile by HWS consist primarily of steel slag, skulls, scale, scrubber solids and broken electrodes, and baghouse dust. The baghouse dust is the primary hazardous constituent and represents less than 10 percent of the waste pile.

With respect to the impact on groundwater, HLA conducted a Preliminary Ground-Water Quality Assessment ("Assessment") which consisted of: (i) installation of three groundwater monitoring wells within the perimeter of the waste pile; (ii) sampling of the groundwater for dissolved lead and cadmium (the key components of the baghouse dust, and reportedly the only constituents in the waste pile which exceed hazardous waste classification criteria); and (iii) chemical analysis of the samples. The Assessment found that there was no dissolved cadmium in the samples and that dissolved lead was found in only one bore hole at a level less than one percent of the EPA EP toxicity limit and approximately one-fifth of the EPA maximum contaminant level, which is the EPA standard for drinking water. The Assessment also found that the caprock beneath the site is not a source of drinking water because of high concentrations of chloride and other dissolved solids. The Assessment concluded: "[T]he chemical results indicate that the waste pile probably is not significantly affecting ground-water quality." Another 1989 HLA preliminary assessment of the site reviewed soil sampling data and concluded that the site poses "relatively low potential risk to human health and the environment."
As a result of these assessments, I am informed that HWS and HLA will propose to EPA a site remediation plan that calls for consolidating the waste pile to the west side of Hanua Street and containing the waste pile under a cap of natural coral material. Under this proposal, the only restriction on land use would be that the natural cap not be disturbed. Based on HLA’s data, I have recommended to the Trustees that they accept the suggested approach since it poses virtually no risk to human health or the environment and involves only a limited constraint on future development.

Finally, regarding interim safety measures, the area has been posted with signs to keep people away.”

**Sinkholes**

The reference to "Hana Street" in the DEIS was a typographical error. It will read "Hanua Street" in the FEIS.

Regarding Sinkhole Site B5-22, the Archaeological Assessment (DEIS, Appendix B) is: "...protected with a high and very substantial chain link fence...[which]...will provide adequate protection for the site for many years to come...[for]...passive preservation...no further measures are recommended" [underlining for emphasis].

This enclosure was installed and is being maintained by The Estate of James Campbell. Furthermore, the sinkhole site is located on land (see attached map) which the State of Hawaii has the option (agreement between The Estate of James Campbell and the State of Hawaii, dated 11 April 1989) of acquiring, at reduced value, for the purposes of expanding Barbers Point Harbor. According to the archaeological report, B6-22 is a square area of approximately 200 feet on a side (DEIS, Appendix E, Page 30).

With reference to the Makahole Sinkhole Area, the FEIS will incorporate the following mitigative measures:

1. A fence will be installed enclosing the sinkhole area, similar to the present enclosure around Sinkhole B5-22. This enclosure will enable the site to be accessible for future research, as well as site visitations by the archaeological community and interested segments of the public, while protecting the resources from vandalism and/or destruction from unauthorized entry.

2. Consideration will be given to securing the sinkhole area for a period of five (5) years to allow study and removal of artifacts, or for the site to be acquired by qualified parties for conservation/preservation use, including an archaeological "park for scientific and education purposes."
According to a letter from the City Department of Parks and Recreation (Oahu, October 23, 1989 [attached]), the Director feels that the matter of an archaeological "park" is under the purview of the State Department of Land and Natural Resources (DLNR). This position is consistent with the Honolulu City Council's Resolution 88-476 adopted January 11, 1989 [attached] that requested the Hawaii State Legislature to allocate funds to the State Department of Land and Natural Resources (DLNR) to acquire land for an Archaeological Park containing representative samples of sinkholes.

**Preliminary Phasing Plan**

Attached is a preliminary phasing plan of the amendment area, as well as areas adjoining the project site that are either DPed and/or zoned for industrial. Portion of the amendment area proposed to be acquired by the State of Hawaii (+56 acres) and the 84 acres currently proposed by the State of Hawaii to expand the Barbers Point Harbor (90/2-2) are not shown in the timetable. These areas will be developed by the State of Hawaii.

Develop of the amendment area is currently expected to begin about year 2005, however, actual phasing of the development will be dependent upon the market demand for industrial space. The Estate of James Campbell anticipates developing the Business-Industrial Park in 50 to 80 acre increments. Those areas currently zoned Industrial are anticipated to be developed first.

The project is expected to include a wide range of lot sizes ranging from one-half acre to over 2-acres in size, with smaller lots to be located closer to Kahului Boulevard and the proposed Kapolei City. It is anticipated that many of the smaller lots will accommodate those industries which will support businesses in Kapolei City. Examples include the automotive services industry, small wholesalers and distributors, and warehousing. Most of the larger lots will be located closer to the Barbers Point Harbor. Bulk storage, large wholesalers and distributors, contracting yards and large warehouses are some of the uses anticipated for the larger lots.

The commercial area is planned for the strip of land between Barbers Point Harbor and the Ko Olina Resort, adjacent to the Ko Olina Harbor. This area could provide commercial establishments supporting the small boat harbor, as well as Barbers Point Harbor and the industrial area. It would also serve as a transition area between the resort/marina environment and the industrial environment.

**DP Public Facilities Map Amendments**

Following is a preliminary list of proposed improvements that will require amendments to the Public Facilities Map:

1. **Drainage**
   
   Major drainage channel
2. Transportation

Main access road to the Harbor (Future Road D)
Second access road

3. Wastewater

Main collection lines
Sewage pump station
Relief sewer along railroad right-of-way

4. Water

Main lines
Nonpotable water source and storage

Subsequent to the approval of the Development Plan Land Use Map Amendment, information and documentation on the proposed improvements will be prepared in accordance with the requirements of the DGF for processing Public Facility Map Amendments.

Safety Buffer Zone

A small portion (+3 acres) of the area proposed for Commercial use, northeast of the Harbor, lies within the Barbers Point Harbor Safety Buffer Zone (Zone II). The more restrictive zone, Zone I, does not penetrate into the site. Development in the impacted area will be coordinated with the State Department of Transportation, Harbor Divisions, to ensure that the proposed activities meet with the intent of the buffer zone (personal communication with Messrs. Niura and Lecong of the Harbors Division).

Mixed Use Alternative

The current amendment requests a change in land uses from Agricultural to Industrial (533 acres) and Commercial (19.2 acres) designations. The proposed amendment suggests ultimate land uses of I-2, I-3, and B-2.

A Mixed Use proposal might request an Industrial development plan designation with an ultimate land use of IRX. Such a designation would allow the land to be used for commercial and industrial uses, enabling a broader tenant mix and, thereby, enhancing development of the Kapolei Business and Industrial Park as a regional service/employment center. A mix of uses would be permitted throughout the park area rather than in the area specified for such uses. Such a designation permits the land owner/developer much more flexibility in meeting market demands over the long term.
DGP is correct in pointing out that its recent position, relating to requests for Mixed Use designations in such areas as Waiau and Gentry Business Park, was based on existing market conditions and not due to prohibitions within the current development plans against such mixed use areas.

Section 4. 7a. of the Development Plan Common Provisions permit Mixed Use in all areas if they implement the following general plan objectives:

1. Optimize land and support facilities;
2. Reduce dependency on automobiles;
3. Save energy; or
4. Provide greater urban experiences for pedestrians.

Technically speaking, however, none of these Common Provisions permit a mix of uses specifically to respond to market conditions.

On the other hand, as the DEIS points out, "The Land Use Ordinance (Section 5.1110) specifically states that the Industrial-Commercial Mixed Use District ... is not intended for widespread application, but only to those areas which have a history of mixing industrial uses with other plans permitting mixed uses, e.g., within the Airport Industrial Park which DGP is supporting for an MX designation during the 1990 DP review process, the intent of the LDO does not appear to support broad application of MX zoning in new areas where there is not an established pattern of "mixing" uses.

We believe that the request proposed, Industrial (533 acres) and Commercial (19 acres), is legitimately different from the Mixed Use alternative described on Page 115. We concur with DGP's reasoning that, at the present time, the need for new industrial land is most critical and, thus, have structured our proposal to provide for additional industrially designated land. At the same time, long run market conditions may make the Mixed Use alternative an appropriate request in the future.

Traffic Impacts

Page 85 of the DEIS was typed in error. The statement referred to should read "It is projected that drivers from minor streets will experience very long or extreme delays (LOS F) crossing or making left turns onto Kalaeloa Boulevard and the future second access road during the peak hours if the intersections are not signalized." The correction will be made in the FEIS.
Again, thank you very much for taking the time to review and provide comments to the DEIS. As appropriate, the DEIS will be modified to incorporate the changes and discussions presented above. For your information, your letter, together with this response, will be published in the FEIS.

Sincerely,

WILLIAM E. WANKET

Encl: (4)
No. 1 - Designated Industrial, State Land Use District Urban
No. 2 - Designated Industrial, State Land Use District Urban
No. 3 - Designated Industrial, State Land Use District Urban
No. 4 - Designated Industrial, State Land Use District Urban
No. 5 - Designated Industrial, State Land Use District Urban
No. 6 - Designated Industrial, State Land Use District Urban
No. 7 - Designated Industrial, State Land Use District Urban

A - State Option Area (56 acres)
B - DP Amendment Application currently being processed by State DOT
DEPARTMENT OF PARKS AND RECREATION
CITY AND COUNTY OF HONOLULU
650 SOUTH KING STREET
HONOLULU, HAWAI'I 96813

October 23, 1989

Mrs. Jane Hong, Chair
Board of Parks and Recreation
City and County of Honolulu
650 South King Street
Honolulu, Hawaii 96813

Dear Mrs. Hong:

Subject: Proposed Sinkhole Park at Campbell Industrial Park
Tax Map Key: 9-1-14: Portion of 2.

Our review of your proposal for the City to establish a City park within the sinkhole area of the Campbell Industrial subdivision has been completed, and the following recommendation is made.

This proposed natural history reservation park would be a demonstration area for a Natural Area Reserve, which would fall within the purview of the State Parks Division of the Department of Land and Natural Resources. We recommend that Dr. Alan Ziegler's suggestions be presented to that office for its consideration.

This appears to be a worthwhile project as long as it is managed by an agency that is trained to interpret and protect its resources. As far as a passive park area is concerned, there already exists a picnic area at Barber's Point Beach Park, which lies within five blocks of the sinkhole site.

Sincerely,

WALTER M. OZAWA, Director

WHO:js

Attach.

cc: Frank F. Fasi, Mayor
    Arnold Morgado, Jr., Council Chair
    W. Paty, Dept. of Land & Natural Resources
    Oswald Stender, Campbell Estate
    Dr. Alan Ziegler
RESOLUTION

REQUESTING THE HAWAII STATE LEGISLATURE TO ALLOCATE FUNDS TO THE DEPARTMENT OF LAND AND NATURAL RESOURCES TO CONDUCT ARCHAEOLOGICAL RESEARCH ON OAHU'S SINK HOLES TO DETERMINE THEIR VALUE AS HISTORICAL AND ARCHAEOLOGICAL RESOURCES AND TO ACQUIRE LAND FOR AN ARCHAEOLOGICAL PARK CONTAINING REPRESENTATIVE SAMPLES OF SINK HOLES.

WHEREAS, under Chapter 6E of the Hawaii Revised Statutes, it is expressly stated that the State's public policy is "to provide leadership in preserving, restoring and maintaining historic and cultural property, to ensure the administration of such historic and cultural property in a spirit of stewardship and trusteeship for future generations and to conduct activities, plans, and programs in a manner consistent with the preservation and enhancement of historic and cultural property"; and

WHEREAS, the State Department of Land and Natural Resources has been statutorily charged with the responsibility of establishing a comprehensive historic preservation program which includes historic and archeological research such as surveys, excavations, scientific recordings, interpretations and publications on the State's historical and cultural resources; and

WHEREAS, the State Department of Land and Natural Resources has been given the authority to establish new parks by acquisition of property in the name of the State, as the department may deem necessary for the development of the State park system; and

WHEREAS, it has been recently brought to the City Council's attention that there are sink holes located on the Ewa plain, in Wai'anae and on various private and public properties on the Island of Oahu which may contain objects of historical, botanical or archeological value or interest; and

WHEREAS, to carry out the State's public policy commitment, the Council believes that these sink holes should be identified and studied to determine the need of possibly purchasing these sink holes to preserve the historical and archeological knowledge that they may contain for the people of Hawaii; and

WHEREAS, the State Department of Land and Natural Resources has communicated to the City Council that the Department is concerned with developing a plan for the protection of sink holes and that, given the rate of destruction of such historic sites by development, they would support acquisition of an area containing sink holes for purposes of active preservation; now, therefore,
RESOLUTION

BE IT RESOLVED by the Council of the City and County of Honolulu that this body request the Hawaii State Legislature to allocate funds to the State Department of Land and Natural Resources to conduct research on identifying the sink holes on Oahu that contain objects of historical, botanical or archeological value; and

BE IT FURTHER RESOLVED that the Council request the Hawaii State Legislature to allocate funds to the Department of Land and Natural Resources for development of an archeological park which contains representative samples of sink holes; and

BE IT FINALLY RESOLVED that the Clerk be, and he is hereby, directed to transmit a copy of this Resolution to the President of the Senate and the Speaker of the House of Representatives of the Hawaii State Legislature and to the Chairman of the Board of Land and Natural Resources.

INTRODUCED BY: [Signature]

DATE OF INTRODUCTION:

NOV 29 1988
Honolulu, Hawaii

Councilmembers

(OCS/112888/pn) -2-

CITY COUNCIL
CITY AND COUNTY OF HONOLULU
HONOLULU, HAWAII

I hereby certify that the foregoing RESOLUTION was adopted by the COUNCIL OF THE CITY AND COUNTY OF HONOLULU on the date and by the vote indicated to the right.

ATTEST:

RAYMOND A. FUA
CITY CLERK

ARNOLD MORGADO, JR.
CHAIR AND PRESIDING OFFICER

Dated JAN 11 1989

ADOPTED
MEETING HELD

JAN 11 1989

AYE NO AYE

AMOROSE
1
1
1

AUMUA
1
1
1

BAMBU
1
1
1

DOH
1
1
1

FELIX
1
1
1

KANU
1
1
1

KULI
1
1
1

MANN
1
1
1

MORGADO
1
1
1

Resolution No 88-476

Report No

Reference:

9 | 0 | 0
February 5, 1990

MEMORANDUM

To: Benjamin B. Lee, Chief Planning Officer
   Department of General Planning

From: Michael N. Scarfone

Subject: Draft Environmental Impact Statement
         Kapolei Business - Industrial Park

We have reviewed the subject draft Environmental Impact Statement and
have no comments to offer at this time.

Thank you for the opportunity to comment.

   [Signature]

Michael N. Scarfone

cc: The Estate of James Campbell
    c/o William E. Wanket, Inc.
    Pacific Tower, Suite 660
    1001 Bishop Street
    Honolulu, Hawaii 96813

Office of Environmental
Quality Control
February 11, 1990

Mr. Michael N. Scarfone
Director
Department of Housing and Community Development
650 South King Street
5th Floor
Honolulu, Hawaii 96813

RE: Draft Environmental Impact Statement (DEIS) for Proposed Kapolei Business-Industrial Park - Response to Comments Received

Dear Mr. Scarfone:

Thank you very much for the copy of your letter of February 5, 1990 to the Department of General Planning regarding the referenced project. We appreciate your efforts in reviewing the DEIS.

For your information, your letter, together with this response, will be published in the Final EIS.

Sincerely,

WILLIAM E. WANKET

cc: Benjamin B. Lee, Chief Planning Officer
MEMORANDUM

TO: BENJAMIN B. LEE  
CHIEF PLANNING OFFICER  
DEPARTMENT OF GENERAL PLANNING

FROM: DONALD A. CLEGG, DIRECTOR

SUBJECT: KAPOLEI BUSINESS-INDUSTRIAL PARK  
DRAFT ENVIRONMENTAL IMPACT STATEMENT (EIS), EWA, OAHU  
TAX MAP KEYS: 9-1-14: PORTION 2; 9-1-15: 1, 13, 16

February 5, 1990

We have reviewed the Draft EIS for the above-described project and offer the following comments.

Section I.C.4, Drainage/Grading, Page 32

The Draft EIS does not address potential impacts to coastal water quality and marine biota especially in relationship to construction and long-term drainage patterns. What is the cumulative impact of increased direct discharges to the ocean from this and other existing and proposed projects along the Barber's Point shoreline? Will mass grading be undertaken on the entire project site at one time? What mitigation measures will be provided during grading? This information should be included in the Final EIS.

Section III.B, Soils, Page 44

The Draft EIS states that erosion could result from clearing, grubbing and future construction. After construction is completed, however, and landscaping and vegetative plantings have been replaced, the Draft EIS states that the level of erosion is expected to decrease.

Will long-term erosion levels (pre- and post-development) decrease or increase? The Final EIS should include comparison of existing and predicted levels of erosion and storm run-off.
January 19, 1990

Mr. William E. Wanket
Pacific Tower, Suite 1010
1001 Bishop Street
Honolulu, Hawaii 96813

Dear Mr. Wanket:

Draft Environmental Impact Statement for the Kapolei Business-Industrial Park

We have reviewed the Draft Environmental Impact Statement (DEIS) and have the following comments:

1. The DEIS on page 4 should state the property owner(s) of the subject parcels under review. The project area should be clarified. The text indicated 552.1 acres and the maps indicate 522.09 acres.

2. The DEIS indicated that the applicant is requesting the redesignation of the HECO substation site to Industrial use. The land use category of Public and Quasi-public use includes those areas designated for major utility plants and substations and, thus, may be a more appropriate land use designation. On page 91, the DEIS states that several overhead lines are found traversing the site. The DEIS should also describe and locate present and future HECO easements.

3. The DEIS on page 57 indicated that a 6-acre area has been used to store approximately 130,000 tons of slag by Hawaiian Western Steel and "baghouse dust" containing lead and cadmium. Although the DEIS considers this an unresolved issue, the DEIS should describe the potential impacts on ground and surface water, air quality and future land uses and activities. The inclusion of safety standards
regarding these hazardous materials would also be useful for the EIS reviewers. The DEIS should discuss whether such a site is developable after remediation "to consolidate the contaminants by covering with a permeable cap of native soil" and what interim safety measures have been provided such as fences and signs.

4. The reference to Hana Road in the Archaeology section of the DEIS may be a typographical error, proper reference appears to be Hanua Street in Ewa. The archaeological assessment recommends further assessment of archaeological sites in the project area and also recommends preservation of two sites, Sinkhole Site B6-22 and the Malakole Sinkhole area. Inasmuch as the preservation of these sites is recommended, we would recommend redesignation of these sites on the DP Land Use Map to Preservation use. The DEIS should clearly identify the boundaries of the area to be preserved of Sinkhole Site B6-22. The DEIS should discuss further measures required for development of these sites as archaeological parks serving both scientific and educational purposes.

5. The DEIS should provide a master plan describing the project's development, its phasing over time, and compatibility with adjacent land uses. The feasibility of the proposed commercial development on the narrow strip of land between the Barbers Point Harbor and Ko Olina Resort appears questionable. The inclusion of a master plan may address this issue.

6. The section on Permits and Approvals should indicate, if required, the DP Public Facilities Map amendments needed for development of this project.

7. The DEIS should discuss whether any of the project areas are affected by the Barbers Point Harbor buffer safety zone. This zone was established to address the potential hazards of the handling of petroleum and explosive cargo. A portion of the proposed Commercial area appears to be within the buffer safety zone.

8. On page 115 the DEIS includes the Mixed Use Alternative to the proposed action. Please include a discussion that clarifies the difference between the two alternatives.
TO: BENJAMIN B. LEE, CHIEF PLANNING OFFICER
DEPARTMENT OF GENERAL PLANNING

FROM: HAROLD KAWASAKI, CHIEF OF POLICE
HONOLULU POLICE DEPARTMENT

SUBJECT: KAPOLEI BUSINESS-INDUSTRIAL PARK

January 25, 1990

We have reviewed the draft environmental impact statement for the subject development and would like to make the following comments.

In the interest of traffic safety, we would like to emphasize the necessity for implementing the mitigative measures mentioned in Appendix L to minimize negative traffic impacts around the area.

Also, please keep us informed of the plans for a new district police station and substation within the Kapolei City development.

Thank you for the opportunity to comment.

HAROLD KAWASAKI
Chief of Police

JOSEPH AVEIRO
Assistant Chief of Police
Support Services Bureau
February 19, 1990

Chief Harold Kawasaki
Chief of Police
Police Department
1455 South Beretania Street
Honolulu, Hawaii 96814

RE: Draft Environmental Impact Statement (DEIS) for the Proposed Kapolei Business-Industrial Park – Response to Comments Received

Dear Chief Kawasaki:

Thank you very much for the copy of your letter of January 25, 1990 to the Department of General Planning regarding the referenced project. We appreciate your efforts in reviewing the DEIS.

We share your views on traffic safety. All efforts to mitigate traffic impacts will be undertaken as discussed in Appendix L. With reference to new police facilities within the Kapolei City development, the Estate agrees and is currently discussing this matter with the City Administration and City Council as part of its zone change request for the initial development of Kapolei City.

Again, thank you for your comments. Your letter, together with this response will be published in the Final EIS.

Sincerely,

WILLIAM E. WANKET

cc: Benjamin B. Lee, Chief Planning Officer
the operation and maintenance of the temporary treatment plant should that alternative be pursued. Any temporary treatment facility will comply with Department of Health standards and regulations.

For your information, your letter, together with this response, will be published in the Final EIS.

Sincerely,

WILLIAM E. WANKET

cc: Benjamin B. Lee, Chief Planning Officer
MEMORANDUM

TO: BENJAMIN B. LEE, CHIEF PLANNING OFFICER
DEPARTMENT OF GENERAL PLANNING

FROM: ALFRED J. THIEDE, DIRECTOR

SUBJECT: KAPOLEI BUSINESS-INDUSTRIAL PARK
DRAFT ENVIRONMENTAL IMPACT STATEMENT
TMK: 9-1-14: 2; 9-1-15: 1, 13 AND 16

This is in response to a letter received on December 27, 1989 from the Office of Environmental Quality Control requesting our comments on the subject project.

Based on our review, we have the following comments to offer:

1. A phasing plan should be provided to indicate the projected rate of development of the proposed business-industrial park in relation to the planned construction of the new roadway system and the widening of Kalaeloa Boulevard. The limits of the phased improvements should also be specified.

2. Traffic signals should be installed at all intersections, where warranted, during the construction of new or widened roads. Underground conduits, pull boxes and wires, vehicular loop detectors and traffic signal interties should be installed at major intersections which do not initially meet the warrants for signals at the time of roadway construction.

3. The developer shall be responsible for the construction of all required roadway improvements to support the planned development in the area.
Ordinances of Honolulu (DEIS, Page 41), and the "Soil Erosion Standards and Guidelines" of the Department of Public Works, City and County of Honolulu.

An erosion control plan will be prepared and submitted for review and approval by the Department of Public Works. Typical control that will be incorporated in an erosion control plan include:

1. Limiting the extent of exposed areas at any one time;
2. Structural measures, including dikes, berms, interceptor ditches, sediment traps, and sediment basins;
3. Temporary and permanent vegetative cover or mulching;
4. Spraying chemicals or liquid asphalt;
5. Temporary wind barriers;
6. Plus other measures that may be recommended by appropriate agencies.

Soils

Long-term erosion levels are expected to decrease as the project site is developed. An analysis of pre and post development conditions will be performed and included in the FEIS.

Archaeological/Historical

The Archaeological/Historic Section of the DEIS will be expanded in the FEIS to reflect the following specific mitigative measures:

**Sinkhole Site B6-22**
Site is protected by a fence enclosure. The fence was installed and is being maintained by Campbell Estate. The site is on land which is to be made available for purchase, at reduced value, to the State of Hawaii.

**Sinkhole Site B6-137**
This site is close to B6-22 and is also located on land which will be made available for purchase to the State of Hawaii.

If the State of Hawaii chooses not to purchase the land on which these sites are located, appropriate data recovery plans will be prepared and submitted to DLNR for review and approval prior to the initiation of any construction.

**Large Enclosure in Cane Field**
Further identification and possibly testing and data recovery will be conducted prior to construction.
Homestead Area

Background research on the origin and history of the Homestead and testing of the sinkholes will be accomplished prior to any construction.

Oahu OR&L Right-of-Way

Present plans do not call for a road along the railroad berm. DLNR-Historic Section will be consulted regarding any development that may impact the berm, including the proposed second access road and the drainage channel.

Malahole Sinkhole Area

A fence enclosure will be installed and access to the site will be permitted for further research (surveying, testing, and data recovery), as well as site visitations. A period of five years is being considered for removal of artifacts, or for the site to be acquired by qualified parties.

Prior to any construction in the areas above, DLNR-Historic Section will be contacted to ensure that all necessary archaeological data recovery has been satisfactorily achieved.

AC-2 Parcel West of Project Area

The rectangular parcel referred to is about 64 acres in size. It is currently planned and zoned for agriculture. The majority of the property is used to stockpile and process coral dredged from the Barbers Point Harbor. The remainder of the parcel is unused. The State Department of Transportation, Harbors Division, has filed for a Development Plan Amendment for this parcel requesting a redesignation to Industrial (Waterfront Industrial) (DEIS, Page 2). The Department of General Planning has accepted the amendment for processing during the 1980 DP Annual Review (90/E-2). If approved, the development would be similar in function to the activities proposed for the surrounding lands of the proposed Kapolei Business-Industrial Park.

State Land Use (SUJ) Boundary Amendment Petition

Following approval of the request for a Development Plan Amendment (December 1990) Campbell Estate will proceed to prepare and file for a State Land Use Boundary Amendment Petition.

Again, thank you for your comments. For your information your letter, together with this response will be published in the Final EIS.

Sincerely,

WILLIAM E. WANKET

cc: Benjamin B. Lee, Chief Planning Officer
4. The ultimate ownership or governmental jurisdiction of all roadways in the vicinity of the project area should be specified.

Should you have any questions, please contact Mel Hirayama of my staff at Local 4119.

cc: William E. Wanket, Inc.
April 6, 1990

Mr. Alfred J. Thiede  
Director 
Department of Transportation Services 
650 South King Street 
Honolulu, Hawaii 96813 

RE: Draft Environmental Impact Statement (DEIS) for Proposed Kapolei Business-Industrial Park – Response to Comments Received

Dear Mr. Thiede:

Thank you very much for the copy of your letter of February 21, 1990 to the Department of General Planning regarding the referenced project. We appreciate your efforts in reviewing the DEIS and offer the following information in response to your comments:

Comment - Item #1:

The attached map provides preliminary construction phasing for the proposed Kapolei Business-Industrial area. In addition, a phasing plan projecting roadway improvements to Kualoa Boulevard and the new roadway system will be included in the Final EIS. Limits of the phased improvements will be specified.

Comment - Item #2:

The installation of traffic signals and underground equipment is a standard infrastructure improvement and will be done for warranted intersections.

Comment - Item #3:

The Estate of James Campbell has committed to design and construct (to agency standards) all required roadway improvements in the Ewa Region on a fair share and equitable basis with other existing developers. Campbell Estate will construct all on-site roadway improvements, as required.
DEPARTMENT OF PARKS AND RECREATION
CITY AND COUNTY OF HONOLULU
650 SOUTH KING STREET
HONOLULU, HAWAII 96813

January 11, 1990

TO:                  BENJAMIN B. LEE, CHIEF PLANNING OFFICER
                     DEPARTMENT OF GENERAL PLANNING

FROM:           WALTER M. OZAWA, DIRECTOR

SUBJECT:   DRAFT EIS FOR KAPOLEI BUSINESS-INDUSTRIAL PARK

Thank you for the opportunity to review the subject Draft EIS. Our concerns with this document are as follows:

1. We have trouble reconciling the existence of several hundred acres of unused, brush-covered, industrial-zoned land along the coast in Campbell Industrial Park and mauka of the Hawaii Raceway Park with statements in the Draft EIS about existing utilization and future need for industrial-zoned land. This idle land theoretically would be in use if the market study in the Draft EIS were used to project the need for industrial-zoned land in 1989.

2. State agency comments on our Department's "Report on an Oahu Motor Sports Facility" suggest that there may be no acceptable sites for relocation of Hawaii Raceway Park. If this is the case, then we would oppose granting of City and State approvals allowing other industrial uses of the existing Raceway Park site. The continued low-key use of this site as a motor sports facility is "grandfathered" without a land-use district boundary amendment, development plan amendment, and zoning change. Moreover, a motor sports facility with most use on weekends and evenings is clearly compatible with the automotive and warehousing activities likely to take place on 1-2 zoned Ewa lands.

WALTER M. OZAWA, Director

WMO:js

cc: Harvin T. Miura, Ph. D., Director, OEQC
    William Wanket, Inc.
    Department of Land Utilization
Section III.E. Archaeological/Historical. Page 47

The Final EIS should include a discussion of specific measures to be taken to protect the significant archaeological resources located on the project site. These measures should be discussed in relationship to future development on the project site.

General

a. The rezoning of the proposed project area will isolate a rectangularly shaped parcel of land zoned Ag-2 located west of the project area. What is the current use of this land, and what will be the impact of the proposed rezoning on this parcel? What are the short- and long-term plans for this parcel?

b. When does Campbell Estate anticipate filing the State Land Use (SLU) boundary amendment petition?

We appreciate the opportunity to review the Draft EIS for the Kapolei Business-Industrial Park project. If you have any questions, please contact Diane E. Borchardt of our staff at 527-5349.

[Signature]

DONALD A. CLEGG
Director of Land Utilization

DAC:s1
0251N/41-42
April 3, 1990

Mr. Donald A. Clegg
Director
Department of Land Utilization
650 South King Street
Honolulu, Hawaii 96813

RE: Draft Environmental Impact Statement (DEIS) for Proposed Kapolei Business-Industrial Park - Response to Comments Received

Dear Mr. Clegg:

Thank you very much for the copy of your letter of February 5, 1990 to the Department of General Planning regarding the referenced project. We appreciate your efforts in reviewing the DEIS. Information in response to your comments is provided:

Drainage/Grading

Drainage:

The drainage system to serve the project area will be part of a drainage system intended to accommodate runoff from existing and proposed developments within a watershed area of some 2400 acres. To adequately and fully address the cumulative impacts from all developments within this watershed area, including the project site, the applicant has underway the preparation of a supplemental environmental impact statement that will examine the effects of the system on coastal water quality and marine biota (DEIS, Page 26). The DEIS for the proposed drainage system is expected to be completed prior to the end of this year.

Grading:

The project will be developed in phases (attached is a tentative phasing plan for the project site and surrounding lands already DEP'd and/or zoned). Each phase may have several increments. Grading will be done in accordance with Chapter 23, "Grading, Soil Erosion and Sediment Control" of the Revised
No. 1 - DPed Industrial, State Land Use District Urban
Nos. 2, 3, 4, 6, 7 - DPED Industrial, State Land Use District Urban, Zoned I-2
A - State Option Area (56 acres)
B - DP Amendment Application currently being processed by State DOT.
January 30, 1990

MEMO TO:    BENJAMIN LEE, CHIEF PLANNING OFFICER
            DEPARTMENT OF GENERAL PLANNING

FROM:       HERBERT K. MURAOKA
            DIRECTOR AND BUILDING SUPERINTENDENT

SUBJECT:    KAPOLEI BUSINESS-INDUSTRIAL PARK
            ENVIRONMENTAL IMPACT STATEMENT (EIS)

We have reviewed the subject EIS and have the following comments to offer:

1. The City and County of Honolulu requires one acre for a public building maintenance yard in the Kapolei Business-Industrial Park.

2. The Honolulu Police Department requires one acre for its vehicle evidence storage yard and we recommend that it be contiguous to the building maintenance yard.

3. The Finance Department requires two acres in the Kapolei Business-Industrial Park and they should also be contiguous to the foregoing land requirements.

Thank you for the opportunity to review the subject EIS.

HERBERT K. MURAOKA
Director and Building Superintendent

DC:jo
CC: J. Harada
Campbell Estate (c/o William Wanket, Inc.)
Office of Environmental Quality Control
February 23, 1990

Mr. Herbert K. Muraoka
Director and Building Superintendent
Building Department
650 South King Street
Honolulu, Hawaii 96813

RE: Draft Environmental Impact Statements (DEIS) for Proposed
Kapolei Business-Industrial Park – Response to Comments
Received

Dear Mr. Muraoka:

Thank you very much for the copy of your letter of January 30, 1990
to the Department of General Planning regarding the referenced project.
We appreciate your efforts in reviewing the DEIS and offer the following
information in response to your comments:

The Kapolei Business-Industrial Park proposal is part of the Kapolei
Regional Master Plan that has been over 20 years in the formulation. In
terms of needed municipal facilities to serve the entire Kapolei/Ewa
Region, the Estate is currently in discussions with the Administration
and the City Council on these needed facilities. In these discussions,
the Estate has agreed to commit 19-acres for a Corporation Yard to be
located in Campbell Industrial Park that will house the needs of various
Departments.

Again, thank you for your comments. Your letter, together with this
response, will be published in the Final EIS.

Sincerely,

WILLIAM E. WANKET

cc. Benjamin B. Lee, Chief Planning Officer
February 14, 1990

TO: BENJAMIN LEE, DIRECTOR
DEPARTMENT OF GENERAL PLANNING

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

SUBJECT: DRAFT ENVIRONMENTAL IMPACT STATEMENT (DEIS) FOR THE KAPOLEI BUSINESS-INDUSTRIAL PARK, OAHU

We have the following comment to offer on the DEIS for the proposed business-industrial park.

On page 86 (text), iii (Appendix A): The existing Board of Water Supply (BWS) transmission mains servicing the Campbell Industrial Park were sized according to generalized demands and site locations as indicated in the Ewa Water Master Plan, which serves primarily as a general planning document. When the detailed water master plan for the proposed project and adjacent developments is submitted for review, we will determine if the existing transmission mains are adequate to meet all of the developments' currently projected demands. The document's text should be amended to clarify this situation.

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

cc: The Estate of James Campbell
c/o William E. Wanket, Inc.

Dr. Marvin T. Miura, Director
Office of Environmental Quality Control

Pure Water... man's greatest need - use it wisely.
February 23, 1990

Mr. Kazu Hayashida
Manager and Chief Engineer
Board of Water Supply
630 South Beretania Street
Honolulu, Hawaii 96843

RE: Draft Environmental Impact Statements (DEIS) for Proposed Kapolei Business-Industrial Park - Response to Comments Received

Dear Mr. Hayashida:

Thank you very much for the copy of your letter of February 14, 1990 to the Department of General Planning regarding the referenced project. We appreciate your efforts in reviewing the DEIS and offer the following information in response to your comments.

The Preliminary Engineering Report (PER) will be revised to clarify the adequacy of the water mains in Kalaheo Boulevard. A water master plan is being prepared for the subject project and will be submitted to the Board of Water Supply for their review and approval. Reference to the requirement for a water master plan will be included in the PER.

Again, thank you for your comments. Your letter, together with this response, will be published in the Final EIS.

Sincerely,

WILLIAM E. WANKET

cc: Benjamin B. Lee, Chief Planning Officer
January 22, 1990

MEMORANDUM

TO: BENJAMIN B. LEE, CHIEF PLANNING OFFICER
DEPARTMENT OF GENERAL PLANNING

FROM: SAM CALLEJO, DIRECTOR AND CHIEF ENGINEER

SUBJECT: DRAFT ENVIRONMENTAL IMPACT STATEMENT (DEIS)
KAPOLEI BUSINESS-INDUSTRIAL PARK

THK: 9-1-14; POR. 2 AND 9-1-15: 1, 13, 16

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

1. The acreage for drainage areas A, B, C, D and E should be tabulated on Tables 1, 2 and 3 of the Preliminary Engineering Report (Appendix A).

2. The EIS should address the operation and maintenance of the collection system and pump station.

3. Will the developer pay for the future relief line shown on Figure 9, page 21 of the Appendix A?

4. The developer is responsible for operation and maintenance should the temporary treatment plant alternative be implemented. The approving agency for temporary treatment plants is the State Department of Health.

Sam Callejo

SAM CALLEJO
Director and Chief Engineer

cc: OSQC
The Estate of James Campbell
C/O William E. Wanket, Inc.
February 19, 1990

Mr. Sam Callejo
Director and Chief Engineer
Department of Public Works
650 South King Street
Honolulu, Hawaii 96813

RE: Draft Environmental Impact Statement (DEIS) for Proposed Kapolei Business-Industrial Park - Response to Comments Received

Dear Mr. Callejo:

Thank you very much for the copy of your letter of January 22, 1990 to the Department of General Planning regarding the referenced project. We appreciate your efforts in reviewing the DEIS. Information in response to your comments is provided:

Acreage for drainage areas

Tables 1, 2, and 3 of the Preliminary Engineering Report will be revised for the Final EIS per your recommendation.

Wastewater collection system and pump station

The wastewater collection system and pump station will be designed in accordance with the Design Standards of the Division of Wastewater Management and are intended to be dedicated to the City upon completion. A statement to this effect will be added to the Preliminary Engineering Report.

Future relief line

The Estate of James Campbell will pay for the installation of the relief line shown on Figure 9, page 21 of Appendix A.

Temporary treatment plant

The Estate of James Campbell understands that they will be responsible for
OTHER COMMENT LETTERS
AND
APPLICANT RESPONSES
RESOLUTION

REQUESTING THE HAWAII STATE LEGISLATURE TO ALLOCATE FUNDS TO THE DEPARTMENT OF LAND AND NATURAL RESOURCES TO CONDUCT ARCHAEOLOGICAL RESEARCH ON OAHU'S SINK HOLES TO DETERMINE THEIR VALUE AS HISTORICAL AND ARCHAEOLOGICAL RESOURCES AND TO ACQUIRE LAND FOR AN ARCHAEOLOGICAL PARK CONTAINING REPRESENTATIVE SAMPLES OF SINK HOLES.

WHEREAS, under Chapter 6E of the Hawaii Revised Statutes, it is expressly stated that the State's public policy is "to provide leadership in preserving, restoring and maintaining historic and cultural property, to ensure the administration of such historic and cultural property in a spirit of stewardship and trusteeship for future generations and to conduct activities, plans, and programs in a manner consistent with the preservation and enhancement of historic and cultural property"; and

WHEREAS, the State Department of Land and Natural Resources has been statutorily charged with the responsibility of establishing a comprehensive historic preservation program which includes historic and archeological research such as surveys, excavations, scientific recordings, interpretations and publications on the State's historical and cultural resources; and

WHEREAS, the State Department of Land and Natural Resources has been given the authority to establish new parks by acquisition of property in the name of the State, as the department may deem necessary for the development of the State park system; and

WHEREAS, it has been recently brought to the City Council's attention that there are sink holes located on the Ewa plain, in Waianae and on various private and public properties on the Island of Oahu which may contain objects of historical, botanical or archeological value or interest; and

WHEREAS, to carry out the State's public policy commitment, the Council believes that these sink holes should be identified and studied to determine the need of possibly purchasing these sink holes to preserve the historical and archeological knowledge that they may contain for the people of Hawaii; and

WHEREAS, the State Department of Land and Natural Resources has communicated to the City Council that the Department is concerned with developing a plan for the protection of sink holes and that, given the rate of destruction of such historic sites by development, they would support acquisition of an area containing sink holes for purposes of active preservation; now, therefore,
RESOLUTION

BE IT RESOLVED by the Council of the City and County of Honolulu that this body request the Hawaii State Legislature to allocate funds to the State Department of Land and Natural Resources to conduct research on identifying the sink holes on Oahu that contain objects of historical, botanical or archaeological value; and

BE IT FURTHER RESOLVED that the Council request the Hawaii State Legislature to allocate funds to the Department of Land and Natural Resources for development of an archeological park which contains representative samples of sink holes; and

BE IT FINALLY RESOLVED that the Clerk be, and he is hereby, directed to transmit a copy of this Resolution to the President of the Senate and the Speaker of the House of Representatives of the Hawaii State Legislature and to the Chairman of the Board of Land and Natural Resources.

INTRODUCED BY:

DATE OF INTRODUCTION:

NOV 29 1988
Honolulu, Hawaii

Councilmembers

(CCS/112888/pn)

CITY COUNCIL
CITY AND COUNTY OF HONOLULU
HONOLULU, HAWAII

I hereby certify that the foregoing RESOLUTION was adopted by the COUNCIL OF THE CITY AND COUNTY OF HONOLULU on the date and by the vote indicated to the right.

ATTEST:

RAYMOND A. PUA
CITY CLERK

ARNOLD MORGADO, JR.
CHAIR AND PRESIDING OFFICER

Dated JAN 11 1989

ADOPTEO
MEETING HELD

JAN 11 1989

ATE

NO

AYE

Reference:

Report No.

Resolution No.

88-476
March 20, 1990

Mr. Allen Allison
Bishop Museum
P.O. Box 19000A
Honolulu, Hawaii 96817-0916

RE: Draft Environmental Impact Statement (DEIS) for the Proposed Kapolei Business-Industrial Park - Response to Comments Received

Dear Mr. Allison:

Thank you very much for your letter of February 20, 1990, expressing support for the preservation of the Malakole Sinkhole Area. In response, we offer the following information.

In consideration of its acknowledged archaeological importance, Campbell Estate will install a fence enclosing the Malakole Sinkhole area, similar to the present enclosure around Sinkhole B6-22. This enclosure will enable the site to be accessible for future research, as well as site visitations by the archaeological community and interested segments of the public, while protecting the resources from vandalism and/or destruction from unauthorized entry.

Furthermore, the Estate will explore the possibility of securing the sinkhole area for a period of five (5) years to allow study and removal of artifacts, or for the site to be acquired by qualified parties. In this connection, we attach for your information a copy of the Honolulu City Council’s Resolution 88-476 (adopted January 11, 1989) requesting the Hawaii State Legislature to allocate funds to the State Department of Land and Natural Resources (DLNR)...to acquire land for an Archaeological Park containing representative samples of sinkholes.

Again, thank you very much for taking the time to review and provide comments to the DEIS. For your information, your letter, together with this response, will be published in the Final EIS.

Sincerely,

[Signature]

WILLIAM E. WANKET

cc: Mr. Benjamin B. Lee, Chief Planning Officer

Encl (1)
February 20, 1990

Mr. William E. Wanket, President
William E. Wanket, Inc.
Pacific Tower 660
1001 Bishop Street
Honolulu, HAWAII 96813

Dear Mr. Wanket:

Sinkhole Preservation — Barbers Point

I am writing to support the long term preservation of the remaining Campbell Estate sinkhole area at Barbers Point. These sinkholes constitute one of the richest fossil deposits in the Hawaiian Islands and are one of only two known fossil deposits on the island of Oahu. The discovery of these and other large fossil deposits in Hawaii has been one of the most exciting scientific events of this century. Analysis of bones recovered from these deposits has completely revolutionized our understanding of the origin and evolutionary history of birds on Oahu and has given us important insights into the probable history of other isolated islands in the Pacific. In addition, because many of the bones were found in an archaeological context, our understanding of early human impacts on native Hawaiian species has been dramatically increased.

Inasmuch as the sinkholes are easily accessible and are concentrated in one area, they can be visited by university classes, school groups and others who are interested in Hawaiian natural history and want to see, first hand, how scientists reconstruct the past through the analysis of fossil deposits. There is nowhere else on Oahu and indeed nowhere else in Hawaii where this is possible.

In view of the tremendous scientific and educational value of the Barbers Point fossil deposits, I strongly urge that the remaining 8 acre parcel of sinkholes be preserved and ultimately be given full state protection through incorporation into the Natural Areas Reserve System.

Thank you for your consideration.

Sincerely yours,

Allen Allison
Chair
Department of Zoology

The State Museum of Natural and Cultural History
1525 Bernice Street - P.O. Box 190004 - Honolulu, Hawaii - 96817-0916
Telephone: (808) 841-3311 - Fax: (808) 841-8988
RESOLUTION

REQUESTING THE HAWAII STATE LEGISLATURE TO ALLOCATE FUNDS TO THE DEPARTMENT OF LAND AND NATURAL RESOURCES TO CONDUCT ARCHEOLOGICAL RESEARCH ON OAHU'S SINK HOLES TO DETERMINE THEIR VALUE AS HISTORICAL AND ARCHEOLOGICAL RESOURCES AND TO ACQUIRE LAND FOR AN ARCHEOLOGICAL PARK CONTAINING REPRESENTATIVE SAMPLES OF SINK HOLES.

WHEREAS, under Chapter 6E of the Hawaii Revised Statutes, it is expressly stated that the State's public policy is "to provide leadership in preserving, restoring and maintaining historic and cultural property, to ensure the administration of such historic and cultural property in a spirit of stewardship and trusteeship for future generations and to conduct activities, plans, and programs in a manner consistent with the preservation and enhancement of historic and cultural property"; and

WHEREAS, the State Department of Land and Natural Resources has been statutorily charged with the responsibility of establishing a comprehensive historic preservation program which includes historic and archeological research such as surveys, excavations, scientific recordings, interpretations and publications on the State's historical and cultural resources; and

WHEREAS, the State Department of Land and Natural Resources has been given the authority to establish new parks by acquisition of property in the name of the State, as the department may deem necessary for the development of the State park system; and

WHEREAS, it has been recently brought to the City Council's attention that there are sink holes located on the Ewa plain, in Waianae and on various private and public properties on the island of Oahu which may contain objects of historical, botanical or archeological value or interest; and

WHEREAS, to carry out the State's public policy commitment, the Council believes that these sink holes should be identified and studied to determine the need of possibly purchasing these sink holes to preserve the historical and archeological knowledge that they may contain for the people of Hawaii; and

WHEREAS, the State Department of Land and Natural Resources has communicated to the City Council that the Department is concerned with developing a plan for the protection of sink holes and that, given the rate of destruction of such historic sites by development, they would support acquisition of an area containing sink holes for purposes of active preservation; now, therefore,
RESOLUTION

BE IT RESOLVED by the Council of the City and County of Honolulu that this body request the Hawaii State Legislature to allocate funds to the State Department of Land and Natural Resources to conduct research on identifying the sink holes on Oahu that contain objects of historical, botanical or archeological value; and

BE IT FURTHER RESOLVED that the Council request the Hawaii State Legislature to allocate funds to the Department of Land and Natural Resources for development of an archeological park which contains representative samples of sink holes; and

BE IT FINALLY RESOLVED that the Clerk be, and he is hereby, directed to transmit a copy of this Resolution to the President of the Senate and the Speaker of the House of Representatives of the Hawaii State Legislature and to the Chairman of the Board of Land and Natural Resources.

INTRODUCED BY:

DATE OF INTRODUCTION:
NOV 29 1988
Honolulu, Hawaii

Councilmembers

(CCS/112888/pn)

-2-

CITY COUNCIL
CITY AND COUNTY OF HONOLULU
HONOLULU, HAWAII

I hereby certify that the foregoing RESOLUTION was adopted by the COUNCIL OF THE CITY AND COUNTY OF HONOLULU on the date and by the vote indicated to the right.

ATTEST:

RAYMOND W. PLA
CITY CLERK

ARNOLD MORGADO, JR.
CHAIR AND PRESIDING OFFICER

Dated JAN 1 1 1989

ADVERTISED
MEETING HELD

JAN 1 1 1989

A. V. N. A. V.

ACREMONI

D. M. T.

D. D.

F. E.

A. K.

K. A.

K. M.

M.

MORGADO

A. V. N. A. V.

9

0

Reference:

Report No.

Resolution No.

88-476
February 6, 1990

Department of General Planning
City and County of Honolulu
650 South King Street
Honolulu, Hawai‘i 96813


The National Audubon Society and the Hawaii Audubon Society strongly support the preservation of an 8-acre parcel containing limestone sinkholes in the Campbell Industrial Park at ‘Ewa, O‘ahu. Audubon hopes that the landowner will dedicate or otherwise transfer this sinkhole parcel to the State of Hawai‘i as a potential Natural Area Reserve.

In Hawai‘i, such sinkholes are found on only O‘ahu. They are a unique geologic feature containing fossil bird bones, including flightless and extinct species, as well as extinct snails and other invertebrates. The site serves as an outdoor classroom for Hawaiian natural history, paleontology, and archaeology. A number of school groups, hiking clubs, government agency representatives, and elected officials have enjoyed visiting and learning about this unique natural treasure. We appreciate the opportunity to comment, and if we can be of any assistance in this matter, please let us know.

Sincerely,

Dana Kokubun
Hawai‘i Representative,
National Audubon Society

Marjorie F.Y. Ziegler
Conservation Chair,
Hawaii Audubon Society

cc:
Hon. Leigh-Wai Doo
Mr. Herbert C. Cornuelle
Dr. M. Lee Goff
Dr. John Harrison
Dr. Marvin T. Miura
Mr. William W. Paty, Jr.
Mr. William E. Wanket
CORRECTION

THE PRECEDING DOCUMENT(S) HAS BEEN REPHOTOGRAPHED TO ASSURE LEGIBILITY
SEE FRAME(S) IMMEDIATELY FOLLOWING
February 6, 1990

Department of General Planning
City and County of Honolulu
650 South King Street
Honolulu, Hawai'i 96813

Re: Kapolei Business-Industrial Park, 'Ewa, O'ahu Draft Environmental Impact Statement

The National Audubon Society and the Hawaii Audubon Society strongly support the preservation of an 8-acre parcel containing limestone sinkholes in the Campbell Industrial Park at 'Ewa, O'ahu. Audubon hopes that the landowner will dedicate or otherwise transfer this sinkhole parcel to the State of Hawai'i as a potential Natural Area Reserve.

In Hawai'i, such sinkholes are found on only O'ahu. They are a unique geologic feature containing fossil bird bones, including flightless and extinct species, as well as extinct snails and other invertebrates. The site serves as an outdoor classroom for Hawaiian natural history, paleontology, and archaeology. A number of school groups, hiking clubs, government agency representatives, and elected officials have enjoyed visiting and learning about this unique natural treasure. We appreciate the opportunity to comment, and if we can be of any assistance in this matter, please let us know.

Sincerely,

Dana Kokubun
Hawai'i Representative,
National Audubon Society

Marjorie F.Y. Ziegler
Conservation Chair,
Hawaii Audubon Society

CC:
Hon. Leigh-Wai Doo
Mr. Herbert C. Cornuelle
Dr. M. Lee Goff
Dr. John Harrison
Dr. Marvin T. Miura
Mr. William W. Paty, Jr.
Mr. William E. Wanket
March 20, 1990

Ms. Dana Kokubun
Hawaii Representative
National Audubon Society
212 Merchant Street
Suite 320
Honolulu, Hawaii 96813

Ms. Marjorie F.Y. Ziegler
Conservation Chair
Hawaii Audubon Society
212 Merchant Street
Suite 320
Honolulu, Hawaii 96813

RE: Draft Environmental Impact Statement (DEIS) for the Proposed Kapolei Business-Industrial Park - Response to Comments Received

To Whom It May Concern:

Thank you very much for your letter of February 6, 1990, expressing support for the preservation of the Malakole Sinkhole Area. In response, we offer the following information.

In consideration of its acknowledged archaeological importance, Campbell Estate will install a fence enclosing the Malakole Sinkhole area, similar to the present enclosure around Sinkhole B6-22. This enclosure will enable the site to be accessible for future research, as well as site visitations by the archaeological community and interested segments of the public, while protecting the resources from vandalism and/or destruction from unauthorized entry.

Furthermore, the Estate will explore the possibility of securing the sinkhole area for a period of five (5) years to allow study and removal of artifacts, or for the site to be acquired by qualified parties. In this connection, we attach for your information a copy of the Honolulu City Council's Resolution 88-476 (adopted January 11, 1989) requesting the Hawaii State Legislature to allocate funds to the State Department of Land and Natural Resources (DLNR)...to acquire land for an Archaeological Park containing representative samples of sinkholes.
Hawaii Audubon Society

Again, thank you very much for taking the time to review and provide comments to the DEIS. For your information, your letter, together with this response, will be published in the Final EIS.

Sincerely,

WILLIAM E. WANKET

cc: Mr. Benjamin B. Lee, Chief Planning Officer

Encl (1)
RESOLUTION

REQUESTING THE HAWAII STATE LEGISLATURE TO ALLOCATE FUNDS TO THE DEPARTMENT OF LAND AND NATURAL RESOURCES TO CONDUCT ARCHAEOLOGICAL RESEARCH ON OAHU'S SINK HOLES TO DETERMINE THEIR VALUE AS HISTORICAL AND ARCHAEOLOGICAL RESOURCES AND TO ACQUIRE LAND FOR AN ARCHAEOLOGICAL PARK CONTAINING REPRESENTATIVE SAMPLES OF SINK HOLES.

WHEREAS, under Chapter 6E of the Hawaii Revised Statutes, it is expressly stated that the State's public policy is "to provide leadership in preserving, restoring and maintaining historic and cultural property, to ensure the administration of such historic and cultural property in a spirit of stewardship and trusteeship for future generations and to conduct activities, plans, and programs in a manner consistent with the preservation and enhancement of historic and cultural property"; and

WHEREAS, the State Department of Land and Natural Resources has been statutorily charged with the responsibility of establishing a comprehensive historic preservation program which includes historic and archeological research such as surveys, excavations, scientific recordings, interpretations and publications on the State's historical and cultural resources; and

WHEREAS, the State Department of Land and Natural Resources has been given the authority to establish new parks by acquisition of property in the name of the State, as the department may deem necessary for the development of the State park system; and

WHEREAS, it has been recently brought to the City Council's attention that there are sink holes located on the Ewa plain, in Waianae and on various private and public properties on the Island of Oahu which may contain objects of historical, botanical or archeological value or interest; and

WHEREAS, to carry out the State's public policy commitment, the Council believes that these sink holes should be identified and studied to determine the need of possibly purchasing these sink holes to preserve the historical and archeological knowledge that they may contain for the people of Hawaii; and

WHEREAS, the State Department of Land and Natural Resources has communicated to the City Council that the Department is concerned with developing a plan for the protection of sink holes and that, given the rate of destruction of such historic sites by development, they would support acquisition of an area containing sink holes for purposes of active preservation; now, therefore,
RESOLUTION

BE IT RESOLVED by the Council of the City and County of Honolulu that this body request the Hawaii State Legislature to allocate funds to the State Department of Land and Natural Resources to conduct research on identifying the sink holes on Oahu that contain objects of historical, botanical or archeological value; and

BE IT FURTHER RESOLVED that the Council request the Hawaii State Legislature to allocate funds to the Department of Land and Natural Resources for development of an archeological park which contains representative samples of sink holes; and

BE IT FINALLY RESOLVED that the Clerk be, and he is hereby, directed to transmit a copy of this Resolution to the President of the Senate and the Speaker of the House of Representatives of the Hawaii State Legislature and to the Chairman of the Board of Land and Natural Resources.

INTRODUCED BY:

DATE OF INTRODUCTION:

NOV 29, 1988
Honolulu, Hawaii

COUNCILMEMBERS

(CCS/112888/pn)

-2-
February 6, 1990

C & C Department of General Planning
650 South King Street, 8th Floor
Honolulu, Hawaii 96813

Dear Sir:

Subject: Draft Environmental Impact Statement (EIS) for Kapolei Business Industrial Park

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

1. HECO's CEIP substation is within the proposed project area.

2. HECO has fuel oil line easements along Malakole Road (see Attachment 1, Figure 2 from the EIS).

3. HECO has existing and future 138KV and 12KV overhead lines on wood and steel poles within the project area. The overhead lines presently on wood poles will be relocated to steel poles once the subdivision roads are laid out. Easements may be required in those cases where the proposed roads are not aligned in such a manner to accommodate the overhead lines. Electric service and street lighting requirements will have to be coordinated with the Developer.

4. HECO's Engineering Department believes the proposed action will have a major impact on the Hawaii Energy Plan objective for reducing Oahu's dependency on oil. It will have the following specific impact on HECO's future options to use coal as a fuel for the generation of electricity.

   a. It would prevent the use of coal at HECO's Kahe Plant or elsewhere in the Barbers Point area, except for that presently contemplated at the AES facility.

   b. It would prevent obtaining a storage space for coal adjacent to the Barbers Point Harbor.

   c. It would prevent the disposal of coal ash in the excavated area adjacent to the harbor where coral is presently being mined.

An HEI Company
5. Attachment 2 shows the location of the two facilities mentioned in 4b & 4c above and also the proposed coal conveyor to HECO's Kahe plant. Attachment 1 shows the area included in the rezoning plan. The following problems will develop for HECO if the proposed rezoning is approved:

   a. The proposed area for coal storage and ash disposal is to be zoned Industrial. A portion of the proposed ash disposal area is designated for eventual expansion of the state owned harbor facility and is to be classified Maritime Industrial. Coral is presently being mined in a portion of this area. It may be impossible for HECO to obtain permits for a coal storage or ash disposal facility in these areas since they would most likely not be allowed in the rezoned area (i.e., see page 30 of the EIS).

   b. Land costs for the proposed coal use facilities will increase significantly if the area is rezoned from agriculture to Industrial.

   c. If HECO is to eventually burn coal at the Kahe Plant, a coal conveyor system must be installed from Barbers Point Harbor to the Kahe Plant. If a coal storage site cannot be obtained adjacent to the harbor, HECO would have to install a larger and more expensive conveyor to match the capacity of the ship unloader. This would be required to insure the dependability of the unloading operation to avoid possible ship delay charges.

   Attachment 3 (Figure 5 from Appendix A) suggests that a coal conveyor could be run parallel to the AES coal conveyor as far as the proposed industrial park drainage ditch. It would then run along the west side of the drainage ditch to the mauka side of the proposed park; continue along the drainage ditch through the golf course to Farrington highway and then along the highway to the Kahe Plant. An easement for this conveyor must be provided in the proposed industrial park in order to preserve HECO's option to burn coal at the Kahe Plant. Attachment 2 shows the suggested routing of the conveyor as described above.

6. In light of comments No. 4 and No. 5, the following points should be noted:
a. In order to maximize the use of coal at the Kahe Plant and minimize the cost of delivering that coal, HECO needs approximately 70 acres for use as a potential coal storage facility adjacent to the harbor.

b. HECO needs approximately 220 acres for use as a coal ash disposal site. It is proposed that the excavated area to the northeast of the harbor be backfilled with this material to restore it for future industrial development.

c. In order to burn any significant amount of coal at the Kahe Plant, HECO needs an easement through the proposed industrial park for a coal conveyor to deliver coal to the Kahe Plant from either Barbers Point Harbor or the coal storage area.

The above listed requirements will permit HECO to maintain its options to burn coal for the production of electricity at the Kahe Plant.

Sincerely,

[Signature]

for William A. Bonnet

Enclosure

cc: William E. Wanket
    The Estate of James Campbell
    Marvin T. Miura
    Office of Environmental Quality Control
fig. Drainage Basin

KAPOLEI BUSINESS-INDUSTRIAL PARK
EWA, OAHU, HAWAII

Prepared By: ENGINEERING CONCEPTS, INC.
March 8, 1990

Mr. William A. Bonnet
Manager
Environmental Department
Hawaiian Electric Company, Inc.
P.O. Box 2750
Honolulu, Hawaii 96840-0001

RE: Draft Environmental Impact Statement (DEIS) for Proposed Kapolei Business-Industrial Park - Response to Comments Received

Dear Mr. Bonnet:

Thank you very much for the copy of your letter of February 6, 1990 to the Department of General Planning regarding the referenced project. We appreciate your efforts in reviewing the DEIS. Information to comments offered is provided.

Comments - Paragraphs 1, 2, and 3.

We acknowledge the existence of HECO's CEIP substation, present fuel line easements, and existing and future overhead lines. Mention of these utilities will be included in the Final EIS. Coordination requirements for electric lighting will be met.

Comments - Paragraphs 4, 5, and 6.

The Kapolei Business-Industrial Park is an essential link to the successful implementation of the planned Secondary Urban Center. It will accommodate the need to provide land for critical harbor functions as well as the overall spectrum of industrial development, including opportunities for both heavy and light industrial uses, and it is intended to be developed in a manner that maximizes compatibility of existing and planned industrial uses within the Park and the surrounding harbor, military, commercial, residential and resort land uses (DEIS, Pages 22, 36 and 37).
Specific industries, and/or developments, have not been determined for the area. However, the Park is intended for development (except for the portion proposed for commercial) under the Land Use Ordinance zoning districts of I-3 Waterfront Industrial and I-2 Intensive Industrial (DEIS, Figure 6). Attached is a listing of uses allowed in these zoning districts.

In the I-2 and I-3 zoning districts, storage yards are a permitted principal use, and disposal facilities are permitted in the I-2 zoning district, subject to the granting of a TYPE-2 Conditional Use Permit (CUP). In the I-3 zoning district, however, disposal facilities are not allowed. Also, utility installations (conveyance system), TYPE B, are permitted upon approval of a TYPE-2 CUP.

Under the current zoning of the area, AG-1 Restricted Agriculture and AG-2 General Agriculture, storage yards, unless related to agriculture, are not allowed. Furthermore, disposal facilities are not allowed in the AG-1 district. (Personal communication with Kathy Sokugawa, Department of Land Utilization.)

The land and easement requirements to permit HECO to maintain its options to burn coal for the production of electricity at the Kahe Plant as stated in your letter, have been noted.

Again, thank you for reviewing the DEIS. For your information, your letter, together with this response, will be included in the Final EIS.

Sincerely,

WILLIAM E. WANKET

cc: Benjamin B. Lee, Chief Planning Officer

Encl (1)
## TABLE 18-A
### I-2 INTENSIVE INDUSTRIAL DISTRICT
PERMITTED USES AND STRUCTURES

<table>
<thead>
<tr>
<th>Principal</th>
<th>Special Accessory</th>
<th>Conditional</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agricultural products processing, minor and major</td>
<td>See Article 9, Accessory Use</td>
<td>See Article 4</td>
</tr>
<tr>
<td>Automobile service stations</td>
<td>In addition:</td>
<td>Conditional Uses, Type 1:</td>
</tr>
<tr>
<td>Automobile sales and rentals</td>
<td>Dwelling units, provided:</td>
<td>Historic structures, Use of</td>
</tr>
<tr>
<td>Bars, nightclubs, taverns</td>
<td>1. They are occupied by</td>
<td>Hotels</td>
</tr>
<tr>
<td>Broadcasting stations</td>
<td>owners or caretakers of the</td>
<td>Joint development</td>
</tr>
<tr>
<td>Bulk merchandise delivery establishments</td>
<td>principal use on the zoning</td>
<td>Joint use of parking</td>
</tr>
<tr>
<td>Can, bottle and paper recycling</td>
<td>lot.</td>
<td>Neighborhood grocery stores</td>
</tr>
<tr>
<td>Car washing, mechanized, provided:</td>
<td>2. They are located above</td>
<td>Off-site parking facilities</td>
</tr>
<tr>
<td>1. There is no water runoff</td>
<td>or behind the principal uses</td>
<td>Utility installations, Type 8</td>
</tr>
<tr>
<td>2. The lot does not adjoin</td>
<td>in such a way that they do</td>
<td>Wind machines</td>
</tr>
<tr>
<td>a zoning lot in a residential</td>
<td>not interrupt industrial</td>
<td></td>
</tr>
<tr>
<td>or apartment district</td>
<td>frontage.</td>
<td></td>
</tr>
<tr>
<td>Catering establishments</td>
<td>3. No more than 4 are</td>
<td></td>
</tr>
<tr>
<td>Centralized bulk collection,</td>
<td>located on a zoning lot,</td>
<td></td>
</tr>
<tr>
<td>storage and distribution of</td>
<td>with only one dwelling unit</td>
<td></td>
</tr>
<tr>
<td>agricultural products to</td>
<td>per establishment.</td>
<td></td>
</tr>
<tr>
<td>wholesale and retail markets</td>
<td>Offices, including adminis-</td>
<td></td>
</tr>
<tr>
<td>Commercial parking lots and</td>
<td>trative and executive</td>
<td></td>
</tr>
<tr>
<td>garages</td>
<td>offices, provided that they</td>
<td></td>
</tr>
<tr>
<td>Day-care facilities</td>
<td>serve permitted uses in the</td>
<td></td>
</tr>
<tr>
<td>Drive-thru facilities, provided</td>
<td>district and are clearly</td>
<td></td>
</tr>
<tr>
<td>that no speaker boxes and</td>
<td>required for those uses</td>
<td></td>
</tr>
<tr>
<td>drive-thru lanes shall be</td>
<td>Retailing of products which</td>
<td></td>
</tr>
<tr>
<td>within 75 feet and 20 feet,</td>
<td>are assembled, fabricated,</td>
<td></td>
</tr>
<tr>
<td>respectively, of a zoning lot</td>
<td>manufactured or processed on</td>
<td></td>
</tr>
<tr>
<td>in a country, residential,</td>
<td>the premises, except as</td>
<td></td>
</tr>
<tr>
<td>apartment or apartment mixed</td>
<td>otherwise specified under</td>
<td></td>
</tr>
<tr>
<td>use zoning district</td>
<td>Principal Uses</td>
<td></td>
</tr>
<tr>
<td>Eating establishments</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fabricating establishments</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(-continued-)

*Adjoining: without an intervening street or permanent open space over 25 feet in width.*
### TABLE 18-A

**I-2 INTENSIVE INDUSTRIAL DISTRICT PERMITTED USES AND STRUCTURES**

<table>
<thead>
<tr>
<th>Principal</th>
<th>Special Accessory</th>
<th>Conditional</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial institutions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Freight movers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Greenhouses, plant nurseries</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heavy equipment sales and rentals</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heliports</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Helistops</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kennels, commercial, including animal pounds and shelters</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Laboratories, medical and research</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Linen suppliers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manufacturing, processing and packaging establishments, except those listed as CUP's</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Motion picture and television production studios</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Photographic processing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public uses and structures</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Publishing plants for newspapers, books and magazines</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Repair establishments, minor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Repair establishments, major</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resource extraction</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sale and service of machinery used in agricultural production</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Saw mills</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Schools: vocational, technical, industrial, trade</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-storage facilities</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(-continued-)
<table>
<thead>
<tr>
<th>Principal</th>
<th>Special Accessory</th>
<th>Conditional</th>
</tr>
</thead>
<tbody>
<tr>
<td>Storage and sale of seed, feed, fertilizer and other products essential to agricultural production</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Storage yards, but not the sale or processing of scrap, salvage or second-hand material; yards shall be completely enclosed except for necessary openings for ingress and egress by a fence or wall not less than 6 feet in height</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Telecommunications antennas, provided that fencing or other barriers are provided to restrict public access within the area exposed to a power density of 0.1 milliwatt/cm²</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Truck terminals</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Utility installations, Type A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Veterinary establishments</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Warehousing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wholesaling and distribution, including building or similar contracting and home improvement services, materials and equipment retailing and the incidental storage of materials and equipment in fully enclosed buildings</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Principal</td>
<td>Special Accessory</td>
<td>Conditional</td>
</tr>
<tr>
<td>-----------</td>
<td>-----------------</td>
<td>-------------</td>
</tr>
<tr>
<td>Broadcasting Stations</td>
<td>See Article 9, Accessory Use</td>
<td>See Article 4</td>
</tr>
<tr>
<td>Drive-thru facilities, provided that no speaker boxes and drive-thru lanes shall be within 75 feet and 20 feet, respectively, of a zoning lot in a country, residential, apartment or apartment mixed use zoning district</td>
<td>In addition: Offices, including administrative and executive offices, provided that they serve permitted uses in the district and are clearly required for those uses; and</td>
<td>Conditional Uses, Type 1: Historic structures, Use of Joint development Joint use of parking Neighborhood grocery stores Off-site parking facilities Petroleum processing Salvage, scrap and junk storage and processing Utility installations, Type B</td>
</tr>
<tr>
<td>Eating establishments</td>
<td>Holistops</td>
<td>Conditional Uses, Type 2: Broadcasting antennas</td>
</tr>
<tr>
<td>Manufacturing, processing and packaging establishments</td>
<td>Marina accessories</td>
<td></td>
</tr>
<tr>
<td>Maritime-related sales, construction, maintenance, and repairing</td>
<td>Port facilities</td>
<td></td>
</tr>
<tr>
<td>Public uses and structures</td>
<td>Repair establishments, major</td>
<td></td>
</tr>
<tr>
<td>Repair establishments, minor</td>
<td>Storage yards, but not the sale or processing of scrap, salvage or second-hand material; yards shall be completely enclosed except for necessary openings for ingress and egress by a fence or wall not less than 6 feet in height</td>
<td></td>
</tr>
<tr>
<td>Telecommunications antennas, provided that fencing or other barriers are provided to restrict public access within the area exposed to a power density of 0.1 milliwatt/cm²</td>
<td>Truck terminals</td>
<td></td>
</tr>
<tr>
<td>Utility installations, Type A</td>
<td>Warehousing</td>
<td></td>
</tr>
</tbody>
</table>

(continued...)

5-81
# TABLE 19-A
## I-3 WATERFRONT INDUSTRIAL DISTRICT
### PERMITTED USES AND STRUCTURES

<table>
<thead>
<tr>
<th>Principal</th>
<th>Special Accessory</th>
<th>Conditional</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wholesale and retail establishments dealing primarily in bulk materials delivered by or to ship, or by ship and truck in combination</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
January 31, 1990

Mr. William E. Wanket, President
William E. Wanket, Inc.
1001 Bishop St. Pacific #660
Honolulu, HI 96813

Dear Mr. Wanket

I am writing in regards to the final Environmental Impact Statement being prepared for the estate of James Campbell for the Kapolei Business Industrial Park in Ewa, Oahu.

The Hawaii Nature Center has offered guided interpretive walks to view and investigate the sinkholes in the area under question. Because of the popularity of the walks, they are offered almost every quarter. Although group size is normally limited to 20 people, demand from the public has often required a second, consecutive trip be added. Over 135 people have enjoyed visits to the sinkholes in the past 10 months.

Evaluations of the experience by users have always been extremely positive. It is therefore our hope that this unique natural resource will be preserved, and kept accessible so that present and future islanders will be able to enjoy it.

Sincerely,

[Signature]

Tamar I. Chotzen
Executive Director

2131 Makiki Hts. Dr., Honolulu, HI 96822 Ph: 973-0100
March 20, 1990

Ms. Tamara I. Chotzen
Hawaii Nature Center
2131 Makiki Heights Drive
Honolulu, Hawaii 96822

RE: Draft Environmental Impact Statement (DEIS) for the Proposed Kapolei Business-Industrial Park - Response to Comments Received

Dear Ms. Chotzen:

Thank you very much for your letter of January 31, 1990, expressing support for the preservation of the Malakole Sinkhole Area. In response, we offer the following information.

In consideration of its acknowledged archaeological importance, Campbell Estate will install a fence enclosing the Malakole Sinkhole area, similar to the present enclosure around Sinkhole B6-22. This enclosure will enable the site to be accessible for future research, as well as site visitations by the archaeological community and interested segments of the public, while protecting the resources from vandalism and/or destruction from unauthorized entry.

Furthermore, the Estate will explore the possibility of securing the sinkhole area for a period of five (5) years to allow study and removal of artifacts, or for the site to be acquired by qualified parties. In this connection, we attach for your information a copy of the Honolulu City Council's Resolution 88-476 (adopted January 11, 1989) requesting the Hawaii State Legislature to allocate funds to the State Department of Land and Natural Resources (DELR) to acquire land for an Archaeological Park containing representative samples of sinkholes.

Again, thank you very much for taking the time to review and provide comments to the DEIS. For your information, your letter, together with this response, will be published in the Final EIS.

Sincerely,

WILLIAM E. WANKET

cc: Mr. Benjamin B. Lee, Chief Planning Officer

Encl (1)
RESOLUTION

REQUESTING THE HAWAII STATE LEGISLATURE TO ALLOCATE FUNDS TO THE DEPARTMENT OF LAND AND NATURAL RESOURCES TO CONDUCT ARCHAEOLOGICAL RESEARCH ON OAHU'S SINK HOLES TO DETERMINE THEIR VALUE AS HISTORICAL AND ARCHAEOLOGICAL RESOURCES AND TO ACQUIRE LAND FOR AN ARCHAEOLOGICAL PARK CONTAINING REPRESENTATIVE SAMPLES OF SINK HOLES.

WHEREAS, under Chapter 6E of the Hawaii Revised Statutes, it is expressly stated that the State's public policy is "to provide leadership in preserving, restoring and maintaining historic and cultural property, to ensure the administration of such historic and cultural property in a spirit of stewardship and trusteeship for future generations and to conduct activities, plans, and programs in a manner consistent with the preservation and enhancement of historic and cultural property"; and

WHEREAS, the State Department of Land and Natural Resources has been statutorily charged with the responsibility of establishing a comprehensive historic preservation program which includes historic and archeological research such as surveys, excavations, scientific recordings, interpretations and publications on the State's historical and cultural resources; and

WHEREAS, the State Department of Land and Natural Resources has been given the authority to establish new parks by acquisition of property in the name of the State, as the department may deem necessary for the development of the State park system; and

WHEREAS, it has been recently brought to the City Council's attention that there are sink holes located on the Ewa plain, in Waianae and on various private and public properties on the Island of Oahu which may contain objects of historical, botanical or archeological value or interest; and

WHEREAS, to carry out the State's public policy commitment, the Council believes that these sink holes should be identified and studied to determine the need of possibly purchasing these sink holes to preserve the historical and archeological knowledge that they may contain for the people of Hawaii; and

WHEREAS, the State Department of Land and Natural Resources has communicated to the City Council that the Department is concerned with developing a plan for the protection of sink holes and that, given the rate of destruction of such historic sites by development, they would support acquisition of an area containing sink holes for purposes of active preservation; now, therefore,
RESOLUTION

BE IT RESOLVED by the Council of the City and County of Honolulu that this body request the Hawaii State Legislature to allocate funds to the State Department of Land and Natural Resources to conduct research on identifying the sink holes on Oahu that contain objects of historical, botanical or archeological value; and

BE IT FURTHER RESOLVED that the Council request the Hawaii State Legislature to allocate funds to the Department of Land and Natural Resources for development of an archeological park which contains representative samples of sink holes; and

BE IT FINALLY RESOLVED that the Clerk be, and he is hereby, directed to transmit a copy of this Resolution to the President of the Senate and the Speaker of the House of Representatives of the Hawaii State Legislature and to the Chairman of the Board of Land and Natural Resources.

DATE OF INTRODUCTION:

NOV 29 1988
Honolulu, Hawaii

COUNCILMEMBERS

(OCS/112888/pn)

-2-

CITY COUNCIL
CITY AND COUNTY OF HONOLULU
HONOLULU, HAWAII

I hereby certify that the foregoing RESOLUTION was adopted by the COUNCIL OF THE CITY AND COUNTY OF HONOLULU on the date and by the vote indicated to the right.

ATTEST:

RAYMOND K. POLA
CITY CLERK

ARNOLD MORGADO, JR.
CHAIR AND PRESIDING OFFICER

Resolution No.
88-476

Dated JAN 11 1989
MOANALUA GARDENS FOUNDATION
Fostering Cultural & Environmental Awareness
1352 Pineapple Place Honolulu, Hawaii 96819 Ph. (808) 539-0134

OFFICERS
Harriet D. Baldwin
President
Owen Chock
Vice-President
Frances Damon Holi
Vice-President
Leslie Nakashima
Secretary
Agnes K. Cope
Treasurer
C.S.H. May
Assistant Treasurer

BOARD OF DIRECTORS
Darton Aina
Richard Chien-Hoon
Paul R. Gabriel
Stephen E. Harris
Jay Hartwell
Karen K. Hori
Katherine Kazakuchi
H.K. Kojima
Anapana Kato
W. Eric Parker
James A. Richards
Rona Rodenhurst
Clifford Sizer
Lolomaia Snakenberg

ADVISORY COUNCIL
Gladys A. Brandt
Eddie Kanai
John Katal
Kenneth R. Kupchak
Barry J. Rubin
Joyce S. Tsuno
Paul Wechs
Eleanor Wilkerson

DIRECTOR EMERITUS
Kenneth P. Emory

EXECUTIVE DIRECTOR
Paule K. Jennings

EDUCATION DIRECTOR
Lorin T. Gill

January 30, 1990

Mr. William E. Wanket, President
William E. Wanket, Inc.
Pacific Tower 660
1001 Bishop Street
Honolulu, Hawai'i 96813

RE: EIS for Kapolei Business Industrial Park, 'Ewa, O'ahu

Dear Mr. Wanket:

Moanalua Gardens Foundation, after the past few years, has sponsored several educational field trips for the general public which featured visits to the 'Ewa Sinkhole Complex led by eminent archaeologists and zoologists. Our participants have always been impressed by the wealth of information that has been gleaned from excavations in this complex - information as diverse as pre-contact human activity in the area, fossil species, habitat alteration and species extinction by ancient Hawaiians.

The staff of Moanalua Gardens Foundation believes the destruction of this complex would be an irreparable loss of an educational resource. We will urge the Estate of James Campbell to make some provision to save the approximately 8 acre parcel in the northwest corner of the junction of Malakale and "Powerline" roads. We recommend that it be acquired by the State as a Natural Area Reserve.

Sincerely,

Lorin T. Gill

cc: Mr. Fred Trotter
The Estate of James Campbell

Mr. William Paty, Chairman
Department of Land and Natural Resources
March 20, 1990

Mr. Lorin T. Gill
Maunalua Gardens Foundation
1352 Pineapple Place
Honolulu, Hawaii 96819

RE: Draft Environmental Impact Statement (DEIS) for the Proposed Kapolei Business-Industrial Park - Response to Comments Received

Dear Mr. Gill:

Thank you very much for your letter of January 30, 1990, expressing support for the preservation of the Malakole Sinkhole Area. In response, we offer the following information.

In consideration of its acknowledged archaeological importance, Campbell Estate will install a fence enclosing the Malakole Sinkhole area, similar to the present enclosure around Sinkhole B6-22. This enclosure will enable the site to be accessible for future research, as well as site visitations by the archaeological community and interested segments of the public, while protecting the resources from vandalism and/or destruction from unauthorized entry.

Furthermore, the Estate will explore the possibility of securing the sinkhole area for a period of five (5) years to allow study and removal of artifacts, or for the site to be acquired by qualified parties. In this connection, we attach for your information a copy of the Honolulu City Council's Resolution 88-476 (adopted January 11, 1989) requesting the Hawaii State Legislature to allocate funds to the State Department of Land and Natural Resources (DLNR) to acquire land for an Archaeological Park containing representative samples of sinkholes.

Again, thank you very much for taking the time to review and provide comments to the DEIS. For your information, your letter, together with this response, will be published in the Final EIS.

Sincerely,

WILLIAM E. WANKET

cc: Mr. Benjamin B. Lee, Chief Planning Officer

Encl (1)
RESOLUTION

REQUESTING THE HAWAII STATE LEGISLATURE TO ALLOCATE FUNDS TO THE DEPARTMENT OF LAND AND NATURAL RESOURCES TO CONDUCT ARCHAEOLOGICAL RESEARCH ON OHU'S SINK HOLES TO DETERMINE THEIR VALUE AS HISTORICAL AND ARCHAEOLOGICAL RESOURCES AND TO ACQUIRE LAND FOR AN ARCHAEOLOGICAL PARK CONTAINING REPRESENTATIVE SAMPLES OF SINK HOLES.

WHEREAS, under Chapter 6E of the Hawaii Revised Statutes, it is expressly stated that the State's public policy is "to provide leadership in preserving, restoring and maintaining historic and cultural property, to ensure the administration of such historic and cultural property in a spirit of stewardship and trusteeship for future generations and to conduct activities, plans, and programs in a manner consistent with the preservation and enhancement of historic and cultural property"; and

WHEREAS, the State Department of Land and Natural Resources has been statutorily charged with the responsibility of establishing a comprehensive historic preservation program which includes historic and archeological research such as surveys, excavations, scientific recordings, interpretations and publications on the State's historical and cultural resources; and

WHEREAS, the State Department of Land and Natural Resources has been given the authority to establish new parks by acquisition of property in the name of the State, as the department may deem necessary for the development of the State park system; and

WHEREAS, it has been recently brought to the City Council's attention that there are sink holes located on the Ewa plain, in Waianae and on various private and public properties on the Island of Oahu which may contain objects of historical, botanical or archeological value or interest; and

WHEREAS, to carry out the State's public policy commitment, the Council believes that these sink holes should be identified and studied to determine the need of possibly purchasing these sink holes to preserve the historical and archeological knowledge that they may contain for the people of Hawaii; and

WHEREAS, the State Department of Land and Natural Resources has communicated to the City Council that the Department is concerned with developing a plan for the protection of sink holes and that, given the rate of destruction of such historic sites by development, they would support acquisition of an area containing sink holes for purposes of active preservation; now, therefore,
RESOLUTION

BE IT RESOLVED by the Council of the City and County of Honolulu that this body request the Hawaii State Legislature to allocate funds to the State Department of Land and Natural Resources to conduct research on identifying the sink holes on Oahu that contain objects of historical, botanical or archeological value; and

BE IT FURTHER RESOLVED that the Council request the Hawaii State Legislature to allocate funds to the Department of Land and Natural Resources for development of an archeological park which contains representative samples of sink holes; and

BE IT FINALLY RESOLVED that the Clerk be, and he is hereby, directed to transmit a copy of this Resolution to the President of the Senate and the Speaker of the House of Representatives of the Hawaii State Legislature and to the Chairman of the Board of Land and Natural Resources.

INTRODUCED BY:

DATE OF INTRODUCTION:

NOV 29 1988
Honolulu, Hawaii

Councilmembers

(CCS/112888/pn)

-2-

<table>
<thead>
<tr>
<th>CITY COUNCIL</th>
</tr>
</thead>
<tbody>
<tr>
<td>CITY AND COUNTY OF HONOLULU</td>
</tr>
<tr>
<td>HONOLULU, HAWAII</td>
</tr>
</tbody>
</table>

I hereby certify that the foregoing RESOLUTION was adopted by the COUNCIL OF THE CITY AND COUNTY OF HONOLULU on the date and by the vote indicated to the right.

ATTEST:

RAYMOND A. LEA
CITY CLERK

ARNOLD MORGADO, JR.
CHAIR AND PRESIDING OFFICER

Dated JAN 1 1 1989

| ADOPTED MEETING HELD |
| JAN 1 1 1989 |
| AYE | NO | AVE |
| ANGLISTR |  |  |
| BERTSCH |  |  |
| DOUGLAS |  |  |
| DOLE |  |  |
| GELLE |  |  |
| HUI |  |  |
| KANAMU |  |  |
| KIM |  |  |
| MANSO |  |  |
| MORGADO | 9 | 0 | 0 |

Resolution No. 88-476
February 6, 1990

Department of General Planning  
City and County of Honolulu  
650 South King Street, 6th Floor  
Honolulu, Hawaii 96813

Mr. William Wanket  
Estate of James Campbell  
828 Fort Street Mall, Suite 500  
Honolulu, Hawaii 96813

Marvin T. Miura, Ph.D.  
President  
Environmental Impact Study Corporation  
American Savings & Loan Bldg.  
Financial Plaza of the Pacific  
915 Fort Street Mall, Suite 401  
Honolulu, Hawaii 96813

Re: Rezoning of Campbell Estate Property  
Near Barbers Point Deep Draft Harbor

Gentlemen:

This law firm represents Hawaiian Pacific Industries, Inc. ("HPI"), which has leased from the State of Hawaii certain property immediately adjacent to the Barbers Point Deep Draft Harbor. HPI intends to construct a bulk unloader, conveyor system, and related facilities on that property which will be used to unload coal and other bulk cargoes from vessels in the harbor and deliver it to end users.

HPI understands that the Campbell Estate seeks rezoning from heavy industrial to light industrial use of certain property immediately adjacent to the State's land surrounding the harbor. HPI opposes such rezoning for the following reasons.

It is in the interest of the State of Hawaii to diversify its available energy sources and reduce our dependence on imported oil. HPI's unloading facility will
be an important means to this end. The HPI facility will reduce the cost of delivering coal to utilities and other users, thereby making coal more attractive as an alternative to imported oil.

HPI’s operation will be economically viable, however, only if the land surrounding the Barbers Point Harbor retains its present planned heavy industrial zoning which permits the efficient storage, movement, and use of coal and the by-product of its use, ash. It is in the interest of the State, therefore, that the land around the harbor not be zoned in a way which precludes the storage of coal and ash or which puts likely users of coal unacceptably far away from the unloader, the source of the coal.

Property which is zoned for light industrial uses (1-1) apparently may not be used for the storage of coal and ash. Further, light industrial users are not likely to be consumers of coal. Although HPI’s facility will be designed to minimize noise and dust to the extent feasible (and appropriate permits have been obtained in light of those impacts), light industrial uses may be incompatible in kind, use, or character with the adjacent coal unloading facility.

For these reasons, HPI respectfully requests that the rezoning petition be denied.

Yours very truly,

[Signature]

ROBERT J. FARIS

RJF(2.1187):bv

cc: Delbert Quigley
March 8, 1990

Mr. Robert J. Faris
Gelber, Gelber & Ingersoll
A Law Corporation
Suite 1400
Hawaii Tower
745 Fort Street
Honolulu, Hawaii 96813

RE: Draft Environmental Impact Statement (DEIS) for Proposed Kapolei Business-Industrial Park - Response to Comments Received

Dear Mr. Faris:

Thank you very much for your letter of February 6 regarding the rezoning of Campbell Estate property near Barbers Point Harbor. Information in response to comments offered is provided.

Campbell Estate is not seeking rezoning of its lands adjoining the Barbers Point Harbor from heavy industrial to light industrial. However, the following processes are occurring on lands within the area. The State Department of Transportation is processing a change to the Ewa Development Plan Map for approximately 84 acres of AG-2 land east of the harbor for eventual development under the I-3 Waterfront Industrial zoning district. The Campbell Estate land that adjoins the Harbor is currently designated Industrial on the Ewa Development Plan, but zoned AG-2 Agriculture under the Land Use Ordinance. Campbell Estate will be submitting a zone change request to zone this area I-3 Waterfront Industrial, the same zoning district that is currently on the State's land.

Furthermore, Campbell Estate is currently seeking a development plan amendment to redesignate additional lands near the harbor from Agriculture to Industrial (Kapolei Business-Industrial Park proposal). The lands nearest the harbor are intended for development under the I-3 Waterfront Industrial zoning district of the City. Upon approval of the above-mentioned actions, the lands, south, southeast, and east of the harbor with be zoned I-3. The remaining lands except for about 19 acres for commercial, will be developed under the I-2 Intensive Industrial zoning district (DEIS, Figure 6, attached). I-1 zoning has not been proposed.
In the I-2 and I-3 zoning district, storage yards are a permitted principal use. Disposal facilities are permitted in the I-2 zoning district, subject to the granting of a TYPE-2 Conditional Use Permit (CUP). In the I-3 zoning district, however, disposal facilities are not allowed.

Again, thank you for your comments. For your information, your letter, together with this response, will be included in the Final EIS.

Sincerely,

WILLIAM E. WANKET

cc: Benjamin B. Lee, Chief Planning Officer

Encl: (1)
January 31, 1990

Mr. William E. Wanket
Pacific Tower 660
1001 Bishop Street
Honolulu, Hawaii 96813

Dear Mr. Wanket,

According to a proposed Draft Environmental Impact Statement, Kapolei Business-Industrial Park, Ewa, Oahu, five hundred fifty two acres of land are being designated to be rezoned for eventual industrial and commercial use by Campbell Estates. Included for development is an eight acre parcel called the Sinkholes. It is located in the northwest corner of the intersection of Malakole Road and the "Powerline Road." This is an area that should be preserved for its scientific and educational value.

Teachers have visited the Sinkholes and have gained a wealth of information. Students who have visited the site have returned to school with much interest and enthusiasm in the clues to Hawaii's early natural history.

Most of this unique small parcel of land has not been examined scientifically and because there is no other comparable area of study, it would be a great lost should the Sinkholes be developed commercially. Therefore, I certainly recommend that all efforts should be expanded to preserve the designated sinkhole area.

[Signature]
Name

[Signature]  
Science Teacher

Waipahu Intermediate School  
94-455 Farrington Highway, Waipahu, Hi 96797

[Signature]
Date

2/5/90
March 20, 1990

Ms. Kay K. Kon
Waipahu Intermediate
94-455 Farrington Highway
Waipahu, Hawaii 96797

RE: Draft Environmental Impact Statement (DEIS) for the Proposed Kapiolani Business-Industrial Park – Response to Comments Received

Dear Ms. Kon:

Thank you very much for your letter of January 31, 1990, expressing support for the preservation of the Malakole Sinkhole Area. In response, we offer the following information.

In consideration of its acknowledged archaeological importance, Campbell Estate will install a fence enclosing the Malakole Sinkhole area, similar to the present enclosure around Sinkhole B6-22. This enclosure will enable the site to be accessible for future research, as well as site visitations by the archaeological community and interested segments of the public, while protecting the resources from vandalism and/or destruction from unauthorized entry.

Furthermore, the Estate will explore the possibility of securing the sinkhole area for a period of five (5) years to allow study and removal of artifacts, or for the site to be acquired by qualified parties. In this connection, we attach for your information a copy of the Honolulu City Council's Resolution 86-476 (adopted January 11, 1989) requesting the Hawaii State Legislature to allocate funds to the State Department of Land and Natural Resources (DLNR)...to acquire land for an Archaeological Park containing representative samples of sinkholes.

Again, thank you very much for taking the time to review and provide comments to the DEIS. For your information, your letter, together with this response, will be published in the Final EIS.

Sincerely,

WILLIAM E. WANKET

cc: Mr. Benjamin B. Lee, Chief Planning Officer

Encl (1)
RESOLUTION

REQUESTING THE HAWAI'I STATE LEGISLATURE TO ALLOCATE FUNDS TO THE DEPARTMENT OF LAND AND NATURAL RESOURCES TO CONDUCT ARCHAEOLOGICAL RESEARCH ON OAHU'S SINK HOLES TO DETERMINE THEIR VALUE AS HISTORICAL AND ARCHAEOLOGICAL RESOURCES AND TO ACQUIRE LAND FOR AN ARCHAEOLOGICAL PARK CONTAINING REPRESENTATIVE SAMPLES OF SINK HOLES.

WHEREAS, under Chapter 6E of the Hawaii Revised Statutes, it is expressly stated that the State's public policy is "to provide leadership in preserving, restoring and maintaining historic and cultural property, to ensure the administration of such historic and cultural property in a spirit of stewardship and trusteeship for future generations and to conduct activities, plans, and programs in a manner consistent with the preservation and enhancement of historic and cultural property"; and

WHEREAS, the State Department of Land and Natural Resources has been statutorily charged with the responsibility of establishing a comprehensive historic preservation program which includes historic and archeological research such as surveys, excavations, scientific recordings, interpretations and publications on the State's historical and cultural resources; and

WHEREAS, the State Department of Land and Natural Resources has been given the authority to establish new parks by acquisition of property in the name of the State, as the department may deem necessary for the development of the State park system; and

WHEREAS, it has been recently brought to the City Council's attention that there are sink holes located on the Ewa plain, in Waianae and on various private and public properties on the Island of Oahu which may contain objects of historical, botanical or archeological value or interest; and

WHEREAS, to carry out the State's public policy commitment, the Council believes that these sink holes should be identified and studied to determine the need of possibly purchasing these sink holes to preserve the historical and archeological knowledge that they may contain for the people of Hawaii; and

WHEREAS, the State Department of Land and Natural Resources has communicated to the City Council that the Department is concerned with developing a plan for the protection of sink holes and that, given the rate of destruction of such historic sites by development, they would support acquisition of an area containing sink holes for purposes of active preservation; now, therefore,
RESOLUTION

BE IT RESOLVED by the Council of the City and County of Honolulu that this body request the Hawaii State Legislature to allocate funds to the State Department of Land and Natural Resources to conduct research on identifying the sink holes on Oahu that contain objects of historical, botanical or archeological value; and

BE IT FURTHER RESOLVED that the Council request the Hawaii State Legislature to allocate funds to the Department of Land and Natural Resources for development of an archeological park which contains representative samples of sink holes; and

BE IT FINALLY RESOLVED that the Clerk be, and he is hereby, directed to transmit a copy of this Resolution to the President of the Senate and the Speaker of the House of Representatives of the Hawaii State Legislature and to the Chairman of the Board of Land and Natural Resources.

DATE OF INTRODUCTION:

NOV 29 1988
Honolulu, Hawaii

COUNCILMEMBERS

(OCS/112888/pn)

-2-

CITY COUNCIL

CITY AND COUNTY OF HONOLULU, HAWAII

I hereby certify that the foregoing RESOLUTION was adopted by the COUNCIL OF THE CITY AND COUNTY OF HONOLULU on the date and by the vote indicated to the right.

ATTEST:

RAYMOND K. PLA
CITY CLERK

ARNOLD MORGADO, JR.
CHAIR AND PRESIDING OFFICER

DATED: JAN 1 1 1989

ADOPTED

MEETING HELD

JAN 1 1 1989

AYE NO AYE

KAUFMAN

DIASOTO

DOO

PEKER

TILL

KAMANU

EPA

MABLO

MORGADO

Resolution No. 88-476

Reference:

Report No.
January 31, 1990

Mr. William E. Wanket
Pacific Tower 660
1001 Bishop Street
Honolulu, Hawaii 96813

Dear Mr. Wanket,

According to a proposed Draft Environmental Impact Statement, Kapolei Business Industrial Park, Ewa, Oahu, five hundred fifty two acres of land are being designated to be rezoned for eventual industrial and commercial use by Campbell Estates. Included for development is an eight acre parcel called the Sinkholes. It is located in the northwest corner of the intersection of Malakole Road and the "Powerline Road." This is an area that should be preserved for its scientific and educational value.

Teachers have visited the Sinkholes and have gained a wealth of information. Students who have visited the site have returned to school with much interest and enthusiasm in the clues to Hawaii's early natural history.

Most of this unique small parcel of land has not been examined scientifically and because there is no other comparable area of study, it would be a great loss should the Sinkholes be developed commercially. Therefore, I certainly recommend that all efforts should be expanded to preserve the designated sinkhole area.

Name

Teacher

Position

Hawaii Intermediate School

School

Date

9/4/90
March 20, 1990

Ms. Marie Maeda
Waipahu Intermediate
94-455 Farrington Highway
Waipahu, Hawaii 96797

RE: Draft Environmental Impact Statement (DEIS) for the Proposed Kapolei Business-Industrial Park – Response to Comments Received

Dear Ms. Maeda:

Thank you very much for your letter of February 22, 1990, expressing support for the preservation of the Malakole Sinkhole Area. In response, we offer the following information.

In consideration of its acknowledged archaeological importance, Campbell Estate will install a fence enclosing the Malakole Sinkhole area, similar to the present enclosure around Sinkhole B6-22. This enclosure will enable the site to be accessible for future research, as well as site visitations by the archaeological community and interested segments of the public, while protecting the resources from vandalism and/or destruction from unauthorized entry.

Furthermore, the Estate will explore the possibility of securing the sinkhole area for a period of five (5) years to allow study and removal of artifacts, or for the site to be acquired by qualified parties. In this connection, we attach for your information a copy of the Honolulu City Council’s Resolution 88-476 (adopted January 11, 1989) requesting the Hawaii State Legislature to allocate funds to the State Department of Land and Natural Resources (DLNR)...to acquire land for an Archaeological Park containing representative samples of sinkholes.

Again, thank you very much for taking the time to review and provide comments to the DEIS. For your information, your letter, together with this response, will be published in the Final EIS.

Sincerely,

WILLIAM E. WANKET

cc: Mr. Benjamin B. Lee, Chief Planning Officer
RESOLUTION

REQUESTING THE HAWAII STATE LEGISLATURE TO ALLOCATE FUNDS TO THE DEPARTMENT OF LAND AND NATURAL RESOURCES TO CONDUCT ARCHEOLOGICAL RESEARCH ON OAHU'S SINK HOLES TO DETERMINE THEIR VALUE AS HISTORICAL AND ARCHEOLOGICAL RESOURCES AND TO ACQUIRE LAND FOR AN ARCHEOLOGICAL PARK CONTAINING REPRESENTATIVE SAMPLES OF SINK HOLES.

WHEREAS, under Chapter 6E of the Hawaii Revised Statutes, it is expressly stated that the State's public policy is "to provide leadership in preserving, restoring and maintaining historic and cultural property, to ensure the administration of such historic and cultural property in a spirit of stewardship and trusteeship for future generations and to conduct activities, plans, and programs in a manner consistent with the preservation and enhancement of historic and cultural property"; and

WHEREAS, the State Department of Land and Natural Resources has been statutorily charged with the responsibility of establishing a comprehensive historic preservation program which includes historic and archeological research such as surveys, excavations, scientific recordings, interpretations and publications on the State's historical and cultural resources; and

WHEREAS, the State Department of Land and Natural Resources has been given the authority to establish new parks by acquisition of property in the name of the State, as the department may deem necessary for the development of the State park system; and

WHEREAS, it has been recently brought to the City Council's attention that there are sink holes located on the Ewa plain, in Wai'anae and on various private and public properties on the Island of Oahu which may contain objects of historical, botanical or archeological value or interest; and

WHEREAS, to carry out the State's public policy commitment, the Council believes that these sink holes should be identified and studied to determine the need of possibly purchasing these sink holes to preserve the historical and archeological knowledge that they may contain for the people of Hawaii; and

WHEREAS, the State Department of Land and Natural Resources has communicated to the City Council that the Department is concerned with developing a plan for the protection of sink holes and that, given the rate of destruction of such historic sites by development, they would support acquisition of an area containing sink holes for purposes of active preservation; now, therefore,
RESOLUTION

BE IT RESOLVED by the Council of the City and County of Honolulu that this body request the Hawaii State Legislature to allocate funds to the State Department of Land and Natural Resources to conduct research on identifying the sink holes on Oahu that contain objects of historical, botanical or archeological value; and

BE IT FURTHER RESOLVED that the Council request the Hawaii State Legislature to allocate funds to the Department of Land and Natural Resources for development of an archeological park which contains representative samples of sink holes; and

BE IT FINALLY RESOLVED that the Clerk be, and he is hereby, directed to transmit a copy of this Resolution to the President of the Senate and the Speaker of the House of Representatives of the Hawaii State Legislature and to the Chairman of the Board of Land and Natural Resources.

INTRODUCED BY:

DATE OF INTRODUCTION:

NOV 29 1988
Honolulu, Hawaii

Councilmembers

(CCS/112888/pn)

-2-

CITY COUNCIL
CITY AND COUNTY OF HONOLULU
HONOLULU, HAWAII

I hereby certify that the foregoing RESOLUTION was adopted by the COUNCIL OF THE CITY AND COUNTY OF HONOLULU on the date and by the vote indicated to the right.

ATTEST:

RAYMOND K. FLA
CITY CLERK

ARNOLD MORGADO, JR.
CHAIR AND PRESIDING OFFICER

Dated JAN 1 1 1989

ADOPTED MEETING HELD

JAN 1 1 1989

AVE NO AVE

Reference:
Report No.
Resolution No.
88-476
Mr. William E. Wanket, President  
William E. Wanket, Inc.  
Pacific Tower 660  
1001 Bishop Street  
Honolulu, HI  96813  

3 February 1990

Dear Mr. Wanket:

I am writing to you to express my concern over the potential loss of the approximately 8 acre Ewa Sinkhole region of the Campbell Estate which has been proposed to be rezeoned from agricultural to industrial and commercial. As preparer of the final EIS, you are in the unique position of not only recognizing the significance of this area but also in having an impact on its perpetuity.

Although I had heard much of the Ewa Sinkholes while living on the mainland, it was not until a recent University of Hawaii sponsored field trip to the area did I realize the tremendous wealth of fossil and subfossil avian remains. It was an exciting feeling to so easily find the remnants of birds that have been forced into tenuous refuges or have been driven to extinction by the altered landscape man has created. Considering the devastating impact that development has already played on the native Hawaiian flora and fauna, the loss of this rich area would be truly unfortunate.

I strongly believe that all decisions that impact the integrity of our dwindling natural resources, and nowhere more so than in Hawaii, need to be made in a most responsible and uncompromising fashion. The development of this small area would surely be a tragic and irreplaceable loss. I urge you to do what you can to support the preservation of this unique area.

Sincerely,

Robert W. Peck  
1523 A Thurston Ave  
Honolulu, HI  96822
March 20, 1990

Mr. Robert W. Peck
1523A Thurston Avenue
Honolulu, Hawaii 96822

RE: Draft Environmental Impact Statement (DEIS) for the Proposed Kapolei Business-Industrial Park - Response to Comments Received

Dear Mr. Peck:

Thank you very much for your letter of 3 February 1990, expressing support for the preservation of the Malakole Sinkhole Area. In response, we offer the following information.

In consideration of its acknowledged archaeological importance, Campbell Estate will install a fence enclosing the Malakole Sinkhole area, similar to the present enclosure around Sinkhole B6-22. This enclosure will enable the site to be accessible for future research, as well as site visitations by the archaeological community and interested segments of the public, while protecting the resources from vandalism and/or destruction from unauthorized entry.

Furthermore, the Estate will explore the possibility of securing the sinkhole area for a period of five (5) years to allow study and removal of artifacts, or for the site to be acquired by qualified parties. In this connection, we attach for your information a copy of the Honolulu City Council’s Resolution 88-476 (adopted January 11, 1989) requesting the Hawaii State Legislature to allocate funds to the State Department of Land and Natural Resources (DLNR)...to acquire land for an Archaeological Park containing representative samples of sinkholes.

Again, thank you very much for taking the time to review and provide comments to the DEIS. For your information, your letter, together with this response, will be published in the Final EIS.

Sincerely,

WILLIAM E. WANKET

cc: Mr. Benjamin B. Lee, Chief Planning Officer

Encl (1)

Pacific Tower
Suite 660
1001 Bishop Street
Honolulu, HI 96813

Phone
(808) 533-4937
FAX 521-5410
RESOLUTION

REQUESTING THE HAWAII STATE LEGISLATURE TO ALLOCATE FUNDS TO THE DEPARTMENT OF LAND AND NATURAL RESOURCES TO CONDUCT ARCHEOLOGICAL RESEARCH ON OAHU'S SINK HOLES TO DETERMINE THEIR VALUE AS HISTORICAL AND ARCHEOLOGICAL RESOURCES AND TO ACQUIRE LAND FOR AN ARCHEOLOGICAL PARK CONTAINING REPRESENTATIVE SAMPLES OF SINK HOLES.

WHEREAS, under Chapter 6E of the Hawaii Revised Statutes, it is expressly stated that the State's public policy is "to provide leadership in preserving, restoring and maintaining historic and cultural property, to ensure the administration of such historic and cultural property in a spirit of stewardship and trusteeship for future generations and to conduct activities, plans, and programs in a manner consistent with the preservation and enhancement of historic and cultural property"; and

WHEREAS, the State Department of Land and Natural Resources has been statutorily charged with the responsibility of establishing a comprehensive historic preservation program which includes historic and archeological research such as surveys, excavations, scientific recordings, interpretations and publications on the State's historical and cultural resources; and

WHEREAS, the State Department of Land and Natural Resources has been given the authority to establish new parks by acquisition of property in the name of the State, as the department may deem necessary for the development of the State park system; and

WHEREAS, it has been recently brought to the City Council's attention that there are sink holes located on the Ewa plain, in Waianae and on various private and public properties on the Island of Oahu which may contain objects of historical, botanical or archeological value or interest; and

WHEREAS, to carry out the State's public policy commitment, the Council believes that these sink holes should be identified and studied to determine the need of possibly purchasing these sink holes to preserve the historical and archeological knowledge that they may contain for the people of Hawaii; and

WHEREAS, the State Department of Land and Natural Resources has communicated to the City Council that the Department is concerned with developing a plan for the protection of sink holes and that, given the rate of destruction of such historic sites by development, they would support acquisition of an area containing sink holes for purposes of active preservation; now, therefore,
RESOLUTION

BE IT RESOLVED by the Council of the City and County of Honolulu that this body request the Hawaii State Legislature to allocate funds to the State Department of Land and Natural Resources to conduct research on identifying the sink holes on Oahu that contain objects of historical, botanical or archeological value; and

BE IT FURTHER RESOLVED that the Council request the Hawaii State Legislature to allocate funds to the Department of Land and Natural Resources for development of an archeological park which contains representative samples of sink holes; and

BE IT FINALLY RESOLVED that the Clerk be, and he is hereby, directed to transmit a copy of this Resolution to the President of the Senate and the Speaker of the House of Representatives of the Hawaii State Legislature and to the Chairman of the Board of Land and Natural Resources.

INTRODUCED BY:

DATE OF INTRODUCTION:

NOV 29 1988
Honolulu, Hawaii

Council members

(CCS/112888/pn) -2-

CITY COUNCIL
CITY AND COUNTY OF HONOLULU
HONOLULU, HAWAII

I hereby certify that the foregoing RESOLUTION was adopted by the COUNCIL OF THE CITY AND COUNTY OF HONOLULU on the date and by the vote indicated to the right.

ATTEST:

RAYMOND A. PUA
CITY CLERK

ARNOLD MORGADO, JR.
CHAIR AND PRESIDING OFFICER

Dated JAN 1 1 1989

ADOPTED MEETING HELD

<table>
<thead>
<tr>
<th>JAN 1 1 1989</th>
</tr>
</thead>
<tbody>
<tr>
<td>AVE</td>
</tr>
<tr>
<td>-------------------</td>
</tr>
<tr>
<td>AR ME</td>
</tr>
<tr>
<td>NA</td>
</tr>
<tr>
<td>MO</td>
</tr>
</tbody>
</table>


Resolution No. 88-476
January 31, 1990

Mr. William E. Wanket
Pacific Tower 660
1001 Bishop Street
Honolulu, Hawaii 96813

Dear Mr. Wanket,

According to a proposed Draft Environmental Impact Statement, *Kapolei Business Industrial Park, Ewa, Oahu*, five hundred fifty two acres of land are being designated to be rezoned for eventual industrial and commercial use by Campbell Estates. Included for development is an eight acre parcel called the Sinkholes. It is located in the northwest corner of the intersection of Malakole Road and the "Powerline Road." This is an area that should be preserved for its scientific and educational value.

Teachers have visited the Sinkholes and have gained a wealth of information. Students who have visited the site have returned to school with much interest and enthusiasm in the clues to Hawaii's early natural history.

Most of this unique small parcel of land has not been examined scientifically and because there is no other comparable area of study, it would be a great loss should the Sinkholes be developed commercially. Therefore, I certainly recommend that all efforts should be expanded to preserve the designated sinkhole area.

Name Randolph W. Scoville 1460 Hoolaulea Street, Pearl City, Hawaii

Teacher - Science Dept

Position

Highlands Intermediate

School

Date January 31, 1990
March 20, 1990

WILLIAM E. WANKET INC.
Land Use Consultants

Mr. Randolph W. Scoville
Highlands Intermediate
1460 Hoohulea Street
Pearl City, Hawaii 96782

RE: Draft Environmental Impact Statement (DEIS) for the Proposed Kapolei Business-Industrial Park - Response to Comments Received

Dear Mr. Scoville:

Thank you very much for your letter of January 31, 1990, expressing support for the preservation of the Malakole Sinkhole Area. In response, we offer the following information:

In consideration of its acknowledged archaeological importance, Campbell Estate will install a fence enclosing the Malakole Sinkhole area, similar to the present enclosure around Sinkhole B6-22. This enclosure will enable the site to be accessible for future research, as well as site visitations by the archaeological community and interested segments of the public, while protecting the resources from vandalism and/or destruction from unauthorized entry.

Furthermore, the Estate will explore the possibility of securing the sinkhole area for a period of five (5) years to allow study and removal of artifacts, or for the site to be acquired by qualified parties. In this connection, we attach for your information a copy of the Honolulu City Council’s Resolution B-476 (adopted January 11, 1989) requesting the Hawaii State Legislature to allocate funds to the State Department of Land and Natural Resources (DLNR)...to acquire land for an Archaeological Park containing representative samples of sinkholes.

Again, thank you very much for taking the time to review and provide comments to the DEIS. For your information, your letter, together with this response, will be published in the Final EIS.

Sincerely,

WILLIAM E. WANKET

cc: Mr. Benjamin B. Lee, Chief Planning Officer

Encl (1)
RESOLUTION

REQUESTING THE HAWAII STATE LEGISLATURE TO ALLOCATE FUNDS TO THE DEPARTMENT OF LAND AND NATURAL RESOURCES TO CONDUCT ARCHEOLOGICAL RESEARCH ON OAHU'S SINK HOLES TO DETERMINE THEIR VALUE AS HISTORICAL AND ARCHEOLOGICAL RESOURCES AND TO ACQUIRE LAND FOR AN ARCHEOLOGICAL PARK CONTAINING REPRESENTATIVE SAMPLES OF SINK HOLES.

WHEREAS, under Chapter 6E of the Hawaii Revised Statutes, it is expressly stated that the State's public policy is "to provide leadership in preserving, restoring and maintaining historic and cultural property, to ensure the administration of such historic and cultural property in a spirit of stewardship and trusteeship for future generations and to conduct activities, plans, and programs in a manner consistent with the preservation and enhancement of historic and cultural property"; and

WHEREAS, the State Department of Land and Natural Resources has been statutorily charged with the responsibility of establishing a comprehensive historic preservation program which includes historic and archeological research such as surveys, excavations, scientific recordings, interpretations and publications on the State's historical and cultural resources; and

WHEREAS, the State Department of Land and Natural Resources has been given the authority to establish new parks by acquisition of property in the name of the State, as the department may deem necessary for the development of the State park system; and

WHEREAS, it has been recently brought to the City Council's attention that there are sink holes located on the Ewa plain, in Waianae and on various private and public properties on the Island of Oahu which may contain objects of historical, botanical or archeological value or interest; and

WHEREAS, to carry out the State's public policy commitment, the Council believes that these sink holes should be identified and studied to determine the need of possibly purchasing these sink holes to preserve the historical and archeological knowledge that they may contain for the people of Hawaii; and

WHEREAS, the State Department of Land and Natural Resources has communicated to the City Council that the Department is concerned with developing a plan for the protection of sink holes and that, given the rate of destruction of such historic sites by development, they would support acquisition of an area containing sink holes for purposes of active preservation; now, therefore,
RESOLUTION

BE IT RESOLVED by the Council of the City and County of Honolulu that this body request the Hawaii State Legislature to allocate funds to the State Department of Land and Natural Resources to conduct research on identifying the sink holes on Oahu that contain objects of historical, botanical or archeological value; and

BE IT FURTHER RESOLVED that the Council request the Hawaii State Legislature to allocate funds to the Department of Land and Natural Resources for development of an archeological park which contains representative samples of sink holes; and

BE IT FINALLY RESOLVED that the Clerk be, and he is hereby, directed to transmit a copy of this Resolution to the President of the Senate and the Speaker of the House of Representatives of the Hawaii State Legislature and to the Chairman of the Board of Land and Natural Resources.

INTRODUCED BY:

DATE OF INTRODUCTION:

NOV 29 1988
Honolulu, Hawaii

Councilmembers

(ocs/112888/pn)

CITY COUNCIL
CITY AND COUNTY OF HONOLULU
HONOLULU, HAWAII

I hereby certify that the foregoing RESOLUTION was adopted by the COUNCIL OF THE CITY AND COUNTY OF HONOLULU on the date and by the vote indicated to the right.

ATTEST:

RAYMOND K. ULA
CITY CLERK

ARNOLD MORGADO, JR.
CHAIR AND PRESIDING OFFICER

ADMITTED MEETING HELD

JAN 11 1989

AMENDS

DIAZ

DOO

FELIX

HILL

KINAN

MAGNO

MAGNO

Resolution No.

88-476
January 31, 1990

Mr. William E. Wanket
Pacific Tower 660
1001 Bishop Street
Honolulu, Hawaii 96813

Dear Mr. Wanket,

According to a proposed Draft Environmental Impact Statement, Kapolei Business-Industrial Park, Ewa, Oahu, five hundred fifty two acres of land are being designated to be rezoned for eventual industrial and commercial use by Campbell Estates. Included for development is an eight acre parcel called the Sinkholes. It is located in the northwest corner of the intersection of Malakole Road and the "Powerline Road." This is an area that should be preserved for its scientific and educational value.

Teachers have visited the Sinkholes and have gained a wealth of information. Students who have visited the site have returned to school with much interest and enthusiasm in the clues to Hawaii's early natural history.

Most of this unique small parcel of land has not been examined scientifically and because there is no other comparable area of study, it would be a great loss should the Sinkholes be developed commercially. Therefore, I certainly recommend that all efforts should be expanded to preserve the designated sinkhole area.

Marie Sugita 2267 Aumakua Street, Pearl City, Hi 96782
Name

Life Science Teacher
Position

Highlands Intermediate
School

2/7/90
Date
March 20, 1990

Ms. Marie Sugita
Highlands Intermediate
1460 Hoolaulea Street
Pearl City, Hawaii 96782

RE: Draft Environmental Impact Statement (DEIS) for the Proposed Kapolei Business-Industrial Park — Response to Comments Received

Dear Ms. Sugita:

Thank you very much for your letter of February 7, 1990, expressing support for the preservation of the Malakole Sinkhole Area. In response, we offer the following information.

In consideration of its acknowledged archaeological importance, Campbell Estate will install a fence enclosing the Malakole Sinkhole area, similar to the present enclosure around Sinkhole R5-22. This enclosure will enable the site to be accessible for future research, as well as site visitations by the archaeological community and interested segments of the public, while protecting the resources from vandalism and/or destruction from unauthorized entry.

Furthermore, the Estate will explore the possibility of securing the sinkhole area for a period of five (5) years to allow study and removal of artifacts, or for the site to be acquired by qualified parties. In this connection, we attach for your information a copy of the Honolulu City Council’s Resolution 88-476 (adopted January 11, 1989) requesting the Hawaii State Legislature to allocate funds to the State Department of Land and Natural Resources (DLNR)...to acquire land for an Archaeological Park containing representative samples of sinkholes.

Again, thank you very much for taking the time to review and provide comments to the DEIS. For your information, your letter, together with this response, will be published in the Final EIS.

Sincerely,

WILLIAM E. WANKET

cc: Mr. Benjamin B. Lee, Chief Planning Officer

Enc1 (1)
RESOLUTION

REQUESTING THE HAWAII STATE LEGISLATURE TO ALLOCATE FUNDS TO THE DEPARTMENT OF LAND AND NATURAL RESOURCES TO CONDUCT ARCHAEOLOGICAL RESEARCH ON OAHU'S SINK HOLES TO DETERMINE THEIR VALUE AS HISTORICAL AND ARCHAEOLOGICAL RESOURCES AND TO ACQUIRE LAND FOR AN ARCHAEOLOGICAL PARK CONTAINING REPRESENTATIVE SAMPLES OF SINK HOLES.

WHEREAS, under Chapter 6E of the Hawaii Revised Statutes, it is expressly stated that the State's public policy is "to provide leadership in preserving, restoring and maintaining historic and cultural property, to ensure the administration of such historic and cultural property in a spirit of stewardship and trusteeship for future generations and to conduct activities, plans, and programs in a manner consistent with the preservation and enhancement of historic and cultural property"; and

WHEREAS, the State Department of Land and Natural Resources has been statutorily charged with the responsibility of establishing a comprehensive historic preservation program which includes historic and archeological research such as surveys, excavations, scientific recordings, interpretations and publications on the State's historical and cultural resources; and

WHEREAS, the State Department of Land and Natural Resources has been given the authority to establish new parks by acquisition of property in the name of the State, as the department may deem necessary for the development of the State park system; and

WHEREAS, it has been recently brought to the City Council's attention that there are sink holes located on the Ewa plain, in Wai'anae and on various private and public properties on the Island of Oahu which may contain objects of historical, botanical or archeological value or interest; and

WHEREAS, to carry out the State's public policy commitment, the Council believes that these sink holes should be identified and studied to determine the need of possibly purchasing these sink holes to preserve the historical and archeological knowledge that they may contain for the people of Hawaii; and

WHEREAS, the State Department of Land and Natural Resources has communicated to the City Council that the Department is concerned with developing a plan for the protection of sink holes and that, given the rate of destruction of such historic sites by development, they would support acquisition of an area containing sink holes for purposes of active preservation; now, therefore,
RESOLUTION

BE IT RESOLVED by the Council of the City and County of Honolulu that this body request the Hawaii State Legislature to allocate funds to the State Department of Land and Natural Resources to conduct research on identifying the sink holes on Oahu that contain objects of historical, botanical or archeological value; and

BE IT FURTHER RESOLVED that the Council request the Hawaii State Legislature to allocate funds to the Department of Land and Natural Resources for development of an archeological park which contains representative samples of sink holes; and

BE IT FINALLY RESOLVED that the Clerk be, and he is hereby, directed to transmit a copy of this Resolution to the President of the Senate and the Speaker of the House of Representatives of the Hawaii State Legislature and to the Chairman of the Board of Land and Natural Resources.

INTRODUCED BY:

DATE OF INTRODUCTION:

NOV 29 1988
Honolulu, Hawaii

Councilmembers

(CCS/112888/pn)

-2-

CITY COUNCIL
CITY AND COUNTY OF HONOLULU
HONOLULU, HAWAII

I hereby certify that the foregoing RESOLUTION was adopted by the COUNCIL OF THE CITY AND COUNTY OF HONOLULU on the date and by the vote indicated to the right.

ATTEST:

RAYMOND K. PUA
CITY CLERK

ARNOLD MORGADO, JR.
CHAIR AND PRESIDENT OFFICE

Dated JAN 11 1989

ADOPTED MEETING HELD

JAN 11 1989

AYE NO AYE

AMERICAN

DEJESUS

ROO

FELIX

WILL

KAHU

EM

MANSO

MORGADO

Reference:

Report No.

Resolution No.

83-476
ALAN C. ZIEGLER, Ph.D.
Zoological Consultant

45-636 Liula Place
Kāne‘ohe, Hawai‘i  96744

Telephone: (808) 247-5318

13 January 1990

Mr. William E. Wanket, President
William E. Wanket, Inc.
Pacific Tower 660
1001 Bishop Street
Honolulu, Hawai‘i  96813

Dear Mr. Wanket,

Thank you very much for sending a copy of the December 1989 DEIS Kapolei Business-Industrial Park prepared by your firm. It seems an extensive and relatively very thorough document. As a consulted party I would like to offer the following few comments on this DEIS, if I might.

1. pp. 26, 57 "Slag Area": This hazardous material area is shown in Figure 7 (incorrectly cited as "Figure 5" on p. 57) as lying just to the east of a portion of the tree nursery, which in turn lies just east of the unnamed roadway (not shown on the DEIS maps) informally known as the "Powerline (or Quarry) Road". There is, however, an old industrial dump area currently posted with signs reading "Warning Hazardous Materials Keep Out" at about this same distance north of Malakole Road but immediately west of "Powerline Road". Is this latter site a second waste dump, or is it the same one intended to be shown in Figure 7?

2. p. 51 "Malakole Road/Hanua Road Sinkhole(s)". This 8-acre area is here recommended for preservation but the Final EIS might suggest one or more actual means of accomplishing this objective. (That is, perhaps by some zoning designation other than Industrial or Commercial; dedication of the area to the State for possible Natural Reserve designation as a Natural Area Reserve, a possibility suggested by, among others, the City & County Department of Parks and Recreation--see enclosed copy of Walter H. Ozawa letter of 23 October 1989--; or other equivalent action.)

   If preserved, this sinkhole parcel could also easily serve as an additional refuge area for at least two species of officially endangered native plant species (Achyranthus rotundata and Euphorbia skottsbergii), one or both of which are currently being maintained in Campbell Industrial Park or nearby areas.

3. pp. 60ff. "Socio-economic Assessment": The need and/or desirability of open park space or "green areas" within this very extensive proposed industrial-commercial complex--especially for the use and enjoyment of the complex's employees, such as for lunch breaks--does not seem to be addressed here or anywhere else in the DEIS.
4. p. 99 "Sec. 226-12...[of Hawaii State Plan]": To properly "promote the preservation and restoration of significant natural...resources" at least the 8-acre sinkhole parcel discussed in Point 2, above, would have to be assured protection by terms detailed in the final EIS.

This area would undoubtedly qualify as a "significant natural resource" solely by virtue of the bones of many species of prehistorically extinct birds, along with accompanying contemporaneous land snail shells, remains of an extinct land crab, and ancient plant pollen contained in the numerous sinkholes. But the emergent reef itself is an equally valuable natural asset, illustrating as it does the process of sinkhole formation by rainwater solution and containing in its undissolved portions a stratigraphically layered record of at least the past 120,000 years of Hawaiian inshore geologic history. Although originally present around all of the main islands, this fossil reef now persists only on O'ahu, and even here only in remnants, which are today satisfactorily exposed only in this general 'Ewa area.

Additionally, I had a few minor comments and suggestions regarding the "Archaeological/Historic" portion of the DEIS (Appendix E) but, because a convenient occasion arose, I took the liberty of verbally transmitting these directly to personnel of Cultural Surveys Hawaii, the subcontracted consultant firm involved.

Thank you very much for the opportunity to comment on this DEIS. I look forward to seeing the Final EIS. Continued best in everything!

Sincerely,

[Signature]

Alan C. Ziegler

encl.

cc: C&C Department of General Planning
    Honorable Leigh-Wai Doo
    DEOG
    Environmental Center, UH
October 23, 1989

Mrs. Jane Hong, Chair
Board of Parks and Recreation
City and County of Honolulu
650 South King Street
Honolulu, Hawaii 96813

Dear Mrs. Hong:

Subject: Proposed Sinkhole Park at
Campbell Industrial Park
Tax Map Key: 9-1-14: Portion of 2

Our review of your proposal for the City to establish a City park within the
sinkhole area of the Campbell Industrial subdivision has been completed, and
the following recommendation is made.

This proposed natural history reservation park would be a demonstration area
for a Natural Area Reserve, which would fall within the purview of the State
Parks Division of the Department of Land and Natural Resources. We recommend
that Dr. Alan Ziegler's suggestions be presented to that office for its
consideration.

This appears to be a worthwhile project as long as it is managed by an agency
that is trained to interpret and protect its resources. As far as a passive
park area is concerned, there already exists a picnic area at Barber's Point
Beach Park, which lies within five blocks of the sinkhole site.

Sincerely,

WALTER M. OZAWA, Director

WMO:js

Attach.

cc: Frank F. Fasi, Mayor
Arnold Morgado, Jr., Council Chair
M. Paty, Dept. of Land & Natural Resources
Oswald Stender, Campbell Estate
Dr. Alan Ziegler
April 3, 1990

Mr. Alan C. Ziegler, Ph.D
Zoological Consultant
45-636 Liula Place
Kaneohe, Hawaii 96744

RE: Draft Environmental Impact Statement (DEIS) for Proposed
Kapolei Business-Industrial Park - Response to Comments
Received

Dear Mr. Ziegler:

Thank you very much for taking the time to review the above-referenced
DEIS and for your letter of 13 January 1990. In response we offer the
following information.

Comment - Paragraph 1 (Slag Area):

The reference to Figure 5 on DEIS Page 57 will be changed to read Figure 7.
There is only one known industrial waste site in the project area. The
location of the “slag area” shown in Figure 7 will be revised to be shown
west of the Campbell Estate nursery.

Comment - Paragraphs 2, 4 (Malakole Sinkhole Area):

In consideration of its acknowledged archaeological importance, Campbell
Estate will install a fence enclosing the Malakole Sinkhole Area, similar
to the present enclosure around Sinkhole B6-22. This enclosure will enable
the site to be accessible for future research, as well as site visitations
by the archaeological community and interested segments of the public,
while protecting the resources from vandalism and/or destruction from
unauthorized entry.

Beyond this measure, the Estate will explore the possibility of securing
the sinkhole area for a period of five (5) years to allow study and removal
of artifacts, or for the site to be acquired by qualified parties. In this
connection, we attach for your information a copy of the Honolulu City
Council’s Resolution 88-476 (adopted January 11, 1989) requesting the Hawaii
State Legislature to allocate funds to the State Department of Land and
Natural Resources (DENR)...to acquire land for an Archaeological Park containing representative samples of sinkholes.

Comment: Paragraph 2 (Endangered native plant species):

The Estate of James Campbell has been conducting a transplanting program to ensure that the two species of officially endangered native plant species are preserved. Concentrated islands of the Achyrantes rotundata have been transplanted on an area near the H-Power Plant. Naturally occurring populations of the species can be found at the Barbers Point Coast Guard Lighthouse area, the slopes of Kaena, the Barbers Point Naval Air Station (near the runway) and Camp Malakole. The Euphorbia skottsbergii has been transplanted on Navy lands behind the Hawaii Raceway Park and distributed to various botanic gardens. A large population of Euphorbia skottsbergii (about 4,000 to 5,000 plants) can be found at the Barbers Point Naval Air Station area. According to our botanical consultant (Char and Associates), the above measures adequately ensure that the endangered native plant species are preserved.

Comment: Paragraph 3 (Socio-economic Assessment):

As indicated on Page 48 of the Social Impact Assessment, James Campbell Industrial Park recognizes the aesthetic and economic needs to maintain an attractive area. For the past 17 years, the Park has issued Annual Landscape Awards for overall design and landscaping. This continued practice at Kapolei Business-Industrial Park would encourage ongoing beautification efforts and ensure that ample landscaped and open areas would be available for employee use.

Further, it is anticipated that many of the industrial firms will provide on-site areas specifically for employees’ use during their lunch times and breaks. Depending on facility design, the type of leisure-oriented areas may range from indoor cafeterias and lounges, to enclosed garden courts, to outdoor landscaped areas. Additionally, as indicated by your referenced letter from the Parks Department (Ozawa, dated October 23, 1989), there already exists a picnic area at Barbers Point Beach Park, which is located close to the project area.

Comment: Paragraph 4 (Emergent reef):

A Supplemental EIS (SEIS) is currently being prepared by the project engineers for those areas of the SWA/shoreline affected by planned drainageway improvements. Although the drainageway falls outside the project area, the SEIS will consider adjacent developments and address flows and potential impacts to water quality and marine biota.
For your information, according to a letter received from DLNR "The subject parcel is well removed from the periphery of the deep draft harbor and coastline (approximately 1500 to 2000 feet). As such, we expect only minimal, if any, adverse impact to aquatic resources."

Again, thank you for your comments. Your letter, together with this response will be included in the Final EIS.

Sincerely,

WILLIAM E. WANKET

cc: Benjamin B. Lee, Chief Planning Officer
KO OLINA

BARBERS POINT HARBOR

SYM.
PROPOSED DP DESIGNATIONS

INDUSTRIAL
419.99 ac.

INDUSTRIAL (MARITIME)
109.30 ac.

INDUSTRIAL (HECO)
3.60 ac.

COMMERCIAL
19.20 ac.

Total: 552.09 ac.

KAPOLEI BUSINESS-INDUSTRIAL PARK
Proposed Development Plan
Land Use Map

FIGURE 2

prepared for the Estate of James Campbell
prepared by Michael S. Chu, Land Architect

NORTH

0 1000 2000 4000 FEET
KO OLINA
BARBERS POINT HARBOUR

Amendment Area 592.09 ac.

CITY OF KAPOLEI

KAPOLEI BUSINESS-INDUSTRIAL PARK

Existing Development Plan
Land Use Map

prepared for the Estate of James Campbell
prepared by Michael S. Chu, Land Architect

FIGURE 3
SYM. LEGEND

- SPECIAL FLOOD HAZARD
  INUNDATION BY 100 YR.
  FLOOD

ZONE AE BASE FLOOD ELEVATION
DETERMINES

EL. 8 BASE FLOOD ELEVATION IN
FEET WHERE UNIFORM
WITHIN ZONE

ZONE D AREAS IN WHICH FLOOD
HAZARDS ARE UNDETERMINED

KAPOLEI BUSINESS-INDUSTRIAL PARK
Flood Zone Map

FIGURE 10
PHOTO A: Makai view of HECO facility (as indicated on map) of amendment area (200 ft).

PHOTO B: Ground level of makai view from freeway with distant industrial structures in background.
PHOTO A: Makai view from freeway at Campbell Industrial Park off ramp. Existing HECO facility (as indicated on photo) approximates location of O R & L Right-of-Way and mauka boundary of amendment area (see DP Map for land uses in foreground).
PHOTO C: Makai mass in mid-ground of photo.

PHOTO D: Freeway (approximate location). See DP Map for details.

PHOTO E: Distant makai view from Makakilo Park overlooking the Ewa Plain. Existing Campbell Industrial Park, coral mining activities at amendment area and Deep Draft Harbor lies in background of photo.

PHOTO EXHIBIT
FIGURE 12
PHOTO C: Makai view from Kamokila Park. O R & L Right-of-Way is located beyond tree mass in mid-ground of photo.

PHOTO D: Lateral view from Kamokila Park illustrating the location of the freeway (approximate elevation, 100+) and the O R & L Right-of-Way (approximate elevation, 60 ft.). See DP Map for land uses between freeway and O R & L Right-of-Way.
PHOTO F: Mauka view into amendment area as seen from Campbell Industrial Park.

PHOTO G: Typical Campbell Industrial Park streetscape with landscape screening.

PHOTO I: Mauka view into amendment area as seen from Campbell Industrial Park.

PHOTO J: Typical front yard setback with landscaping, ground signage and at Campbell Industrial Park.
typical Campbell Industrial Park
landscape screening.

PHOTO H: Typical Campbell Industrial Park
landscape with landscape (foreground) and 60 ft.
industrial facilities (background).

typical front yard setback with
id signage and at Campbell

PHOTO K: Interior view of typical industrial
lot with landscape screening beyond.

PHOTO EXHIBIT
FIGURE 13
KAPOLEI BUSINESS-INDUSTRIAL PARK
Preliminary Phasing Schedule

FIGURE 14

preparing for the Estate of James Campbell
prepared by Michael S. Chu, Land Architect
RECEIVED AS FOLLOWS

Future Road A

Future Road B

Future Road C

Future Road D

Kalahea Boulevard

Malakole Road

To Bathers Point,
Deep Draft Harbor

Recommended Roadway Improvements for Kalahea Boulevard

FIGURE
16