January 4, 2000

Ms. Genevieve Salmonson, Director
Office of Environmental Quality Control
State Office Tower
235 S. Beretania Street, Room 702
Honolulu, Hawaii 96813-2437

Dear Ms. Salmonson:

Subject: Finding of No Significant Impact (FONSI)
- Kalihi Valley Homes – Sites and Building Improvements
  TMK: 1-3-22: 01
  Kalihi, Honolulu, Oahu, Hawaii

The Housing and Community Development Corporation of Hawaii has reviewed all comments on the Draft Environmental Assessment for the above-referenced project that were received during the 30-day public comment period, which began on May 9, 1999. Based on that review, it has been determined that this project will not have significant environmental effects, and a FONSI has been issued by Governor Benjamin J. Cayetano. We respectfully request the publication of the issuance of this FONSI in January 8, 2000, OEQC Environmental Notice.

Attached for your use are the following:

1. Completed OEQC Publication Form
2. Four copies of the Final EA/FONSI
3. Project Summary – in hard copy and on diskette

If there are any questions, please contact Stanley T. Fujimoto at (808) 587-3179. Thank you for your assistance in this matter.

Sincerely,

[Signature]

Donald K. W. Lau
Executive Director

Enclosures
(Kalihi Valley Homes
Site & Dwelling Improvements)
Honolulu, Oahu, Hawaii

Final Environmental Assessment

Proposing Agency:

State of Hawaii
Housing and Community Development Corporation of Hawaii

November 1999
Kalihi Valley Homes
Site & Dwelling Improvements
Honolulu, Oahu, Hawaii

Final Environmental Assessment

This environmental document is prepared pursuant to:

State of Hawaii "Environmental Impact Statement Rules"
(Chapter 200 of Title 11, Administrative Rules, Department of Health), and


Proposing Agency:

State of Hawaii
Housing and Community Development Corporation of Hawaii

This document and all ancillary sections were prepared under my direction.

Donald K.W. Lau, Executive Director
Housing and Community Development Corporation of Hawaii

Accepting Authority:

Benjamin J. Cayetano, Governor
State of Hawaii

Prepared By:

Group 70 International, Inc.
Architecture • Planning • Interior Design • Environmental Services
925 Bethel Street, 5th Floor
Honolulu, Hawaii 96813

November 1999
REVISIONS TO THE
DRAFT ENVIRONMENTAL ASSESSMENT

Revisions have been made to the Draft EA as a result of further project development and review, and in response to comments received on the Draft EA. To facilitate the readers' ability to distinguish the revisions that have been incorporated into this Final EA, substantive changes and additions to the text are shown as [subject of material]. Non-substantive editing and corrections have not been highlighted, except in cases where Draft EA comment letters made specific reference to the need for a correction. Where large blocks of text have been deleted, a notation is included that briefly describes the subject matter of the deleted material, and this notation is highlighted as follows: [subject of deleted material].

In addition to revisions, a completed "HUD Environmental Assessment Checklist" has been inserted after the Table of Contents.
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**APPENDICES**

A. PRE-CONSULTATION MEETING NOTES

B. KALIHI VALLEY HOMES RENOVATION SURVEY
**LIST OF FIGURES**

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Environmental Assessment
(HUD recommended format per
24 CFR 58.36, revised 1/99)

Project Identification: Kalihi Valley Homes – Site and Dwelling Improvements

Responsible Entity: State of Hawaii
Environmental Assessment

Responsible Entity: State of Hawaii

Certifying Officer: Governor

Project Name: Kalili Valley Homes

Project Location: 2250 Kalena Drive, Honolulu, Oahu, Hawaii

TMK: 1-3-22:1

Estimated total project cost: $47,000,000

Grant Recipient: Housing and Community Development Corporation of Hawaii (HCDCH)

Recipient Address: 677 Queen Street, Suite 300

Honolulu, Hawaii 96813

Project Representative: Stanley T. Fujimoto

Telephone Number: (808) 587-3179

Conditions for Approval: (List all mitigation measures adopted by the responsible entity to eliminate or minimize adverse environmental impacts. These conditions must be included in project contracts or other relevant documents as requirements). [24 CFR 58.40(d), 40 CFR 1505.2(c)]

The following mitigative measures are included in the specifications/plans:

a. Solid and sanitary waste control
b. Dust control
c. Noise control
d. Natural resource control
e. Asbestos removal and lead-based paint control
f. Erosion control

FINDING: [58.40(g)]

☑ Finding of No Significant Impact
(The project will not result in a significant impact on the quality of the human environment)

☐ Finding of Significant Impact
(The project may significantly affect the quality of the human environment)

Prepared by the Housing and Community Development Corporation of Hawaii

Signature: Donald K. W. Lau, Executive Director
Title: Date

RE Approving Official Signature: Benjamin J. Cayetano, Governor
Title/Agency: State of Hawaii
Date
Statement of Purpose and Need for the Proposal: [40 CFR 1508.5(b)]

The 46-year old Kalihi Valley Homes project is one of the State’s oldest and is in need of renovation. The site is presently run-down and in need of rehabilitation.

Description of the Proposal: Include all contemplated actions which logically are either geographically or functionally a composite part of the project, regardless of the source of funding. [24 CFR 58.32, 40 CFR 1508.25]

The proposed project provides for the phased renovation of 301 dwelling units and phased demolition of 11 buildings containing 99 dwelling units originally constructed in 1954. Of the remaining 43 buildings, the interiors will be gutted and replaced with new fixtures and items. The existing Community Center building and administration building will be demolished and replaced with one building. The project will be designed and constructed in multiple phases with a total project completion of approximately 8 to 10 years. See Section 2.2.1 for a more complete description of the phased building renovation and demolition.

Existing Conditions and Trends: Describe the existing conditions of the project area and its surroundings, and trends likely to continue in the absence of the project. [24 CFR 58.40(a)]

The Kalihi Valley Homes project consists of 400 public housing units in one, two, three, four, and five-bedroom configurations throughout 45 buildings on approximately 24 acres of land. The project site also contains a 4,717 square foot office/maintenance building and a 10,179 square foot Community Center.

See Section 2.1 of the Environmental Assessment for a description of the location and site characteristics.

In absence of the project, the site will continue to deteriorate, as will the social and accessibility problems associated with the existing project density of 16 units per acre continue to exist.
## Statutory Checklist

[24 CFR §58.5]

For each listed statute, executive order or regulation, record the determinations made. Note reviews and consultations completed as well as any applicable permits or approvals obtained. Attach evidence that all required actions have been taken. Record any conditions or mitigation measures required. Then, make a determination of compliance or consistency.

### Factors

| Floodplain Management [24 CFR 55, Executive Order 11990] | Project located outside of any designated flood area; within Zone X, an area determined to be outside the 500-year floodplain. Map panel 15001 0112C, 9/28/90. DLNR, Land Division, letter dated 6/7/99. |
| Wetlands Protection [Executive Order 11990] | Property has no vegetation, or topographical characteristics associated with wetlands. |
| Coastal Zone Management Act [Sections 307(c), (d)] | CZM general consistency certification dated 4/8/87. |
| Sole Source Aquifers [40 CFR 149] | N/A |
| Wild and Scenic Rivers Act [Sections 7(b), (c)] | N/A |
| Air Quality [Clean Air Act, Sections 176(c) and (d), and 40 CFR 6, 8, 63] | Project meets federal and state ambient air quality standards as the entire State is within an "attainment" area. Jill Stensrud, Air Quality Environmental Health Specialist, Clean Air Branch, Department of Health. |
| Farmland Protection Policy Act (7 CFR 658) | N/A |
| Environmental Justice [Executive Order 12898] | Project will reduce number of public housing units from 400 to 301; overall impact is positive. |

### HUD Environmental Standards

| Noize Abatement and Control [24 CFR 51 B] | Pending waiver from HUD. |
| Toxic or Hazardous Substances and Radioactive Materials [HUD Notice 79-33] | Add language on lead-based paint from EA |
| Siting of HUD-Assisted Projects near Hazardous Operations [24 CFR 51 C] | N/A |
| Airport Clear Zones and Accident Potential Zones [24 CFR 51 D] | N/A |
### Environmental Assessment Checklist

[Environmental Review Guide HUD CPD 782, 24 CFR 58.40; Ref. 40 CFR 1508.8 & 1508.27]

Evaluate the significance of the effects of the proposal on the character, features and resources of the project area. Enter relevant base data and verifiable source documentation to support the finding. Then enter the appropriate impact code from the following list to make a finding of impact. Impact Codes:

- (1) – No impact anticipated;
- (2) – Potentially beneficial;
- (3) – Potentially adverse;
- (4) – Requires mitigation;
- (5) – Requires project modification. Note names, dates of contact, telephone numbers and page references. Attach additional materials as needed.

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<td>Hawaii State Plan, the General Plan, Primary Urban Center</td>
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<td>And Zoning</td>
<td></td>
<td>Development Plan, State Land Use, Zoning</td>
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<tr>
<td>Compatibility and Urban Impact</td>
<td>1</td>
<td>The site has been developed as a public housing project since</td>
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<td></td>
<td></td>
<td>1953. The project site is located within a residential neighborhood.</td>
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<td>Slope</td>
<td>4</td>
<td>The average slope varies from 2:1 to 1-1/2:1. The buildings are located on narrow pads</td>
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<tr>
<td></td>
<td></td>
<td>parallel to the overall ground slope with the typical slopes ranging from approximately</td>
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<td></td>
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<td>3:1 to 2:1 in between building pods. Mitigative measures are described in</td>
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<td></td>
<td>Sections 3.2 and 3.3.</td>
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<td>Erosion</td>
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<td>All grading operations will be conducted in compliance with dust and erosion control</td>
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<td>requirements of the City and County of Honolulu.</td>
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<td>Soil Suitability</td>
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<td>Soils investigation report dated 10/30/95. Mitigative measures described in Section 3.3.</td>
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<td>Property not located near man-made hazards or airport clear zone.</td>
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<td>Energy Consumption</td>
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<td>Project will not require substantial energy consumption relative to other similar</td>
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<td>projects. Energy consumption may be reduced through efficiencies gained by improving</td>
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<td></td>
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<td>utilities, use of modern energy-efficient appliances and fixtures, and a decrease in</td>
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<td>the number of units.</td>
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<td>Noise – Contribution to Community Noise</td>
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<td>Short-term construction activity during normal working hours.</td>
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<td>Title 11, Hawaii Administrative Rules, Chapter 46, Community</td>
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<td>Noise Control of the Department of Health.</td>
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<td>Short-term construction activity. Conform to strict dust control measures, Chapter</td>
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<td>Effects of Ambient Air Quality on</td>
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<td>37-A, Public Health Regulations 1988: U.S. Soil Conservation Services, Erosion and</td>
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<td>Reduction in density and exterior improvements, including</td>
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<td>Visual Quality – Coherence, Diversity,</td>
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<td>construction of house-like pitched roofs in contrast to existing “boxy” flat roots,</td>
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<td>Compatible Use and Scale</td>
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<td>will improve the visual character of the project site.</td>
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<td>Demographic Character Changes</td>
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<td>Reduction in density from 16 to 12 units per acre will reduce concentration of low-income families.</td>
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<td>Displacement</td>
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<td>Current residents will be relocated during the course of renovation and demolition to other public housing projects and outside housing opportunities.</td>
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<td>Will create short-term benefits as a result of design and construction employment.</td>
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<td>99 units will be demolished. Therefore, there should be a reduction in school-age children over time. Kaewai Elementary, Dole Intermediate, Farrington High School.</td>
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<td>Commercial Facilities</td>
<td>1</td>
<td>No impact</td>
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<td>Existing health care facilities - Kuakini Medical Center, St. Francis Medical Center</td>
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<td>Social Services</td>
<td>2</td>
<td>New community center facility</td>
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<td>Solid Waste</td>
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<td>99 units will be demolished. Therefore, less solid waste will be generated over time.</td>
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<td>Waste Water</td>
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<td>Letter from Department of Environmental Services dated 5/6/99.Existing on-site sewer lines will be replaced with larger lines.</td>
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<td>Storm Water</td>
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<td>Project will improve on-site drainage condition through improvements to drainage infrastructure, on-site secondary interceptor ditches and adjoining upslope terrain will be improved. Small ditches along the top of steeply sloped banks or at building downspouts will be constructed to connect to existing storm drains.</td>
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<td>Water Supply</td>
<td>2</td>
<td>Existing on-site water system will be improved.</td>
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<td>Letter from the Police Department dated 6/7/99. Proposed renovation and improvements will help to instill pride for residents and thus result in helping to minimize calls for police services.</td>
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<td>- Fire</td>
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<td>Kalihi Uka Fire Station on Kamehameha IV Road Kuakini Hospital; St. Francis Hospital</td>
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<td>Project will create meaningful open space throughout the development</td>
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<td>- Recreation</td>
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<tr>
<td>- Cultural Facilities</td>
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<td>Transportation</td>
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<td>99 units will be demolished; therefore, the traffic associated with the project will decrease over time.</td>
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### Natural Features

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<td>Water Resources</td>
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<td>Project within service area of City and County water supply.</td>
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<td>Surface Water</td>
<td>1</td>
<td>Not situated in close proximity to streams, reservoirs or ocean.</td>
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<td>Unique Natural Features and Agricultural Lands</td>
<td>1</td>
<td>Existing public housing project.</td>
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<td>Vegetation and Wildlife</td>
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<td>Not within area containing endangered species of animals or plants.</td>
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### Other Factors

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**Note:** The Responsible Entity must additionally document compliance with 24 CFR §68.6 in the ERR, particularly with the Flood Insurance requirements of the Flood Disaster Protection Act and the Buyer Disclosure requirements of the HUD Airport Runway Clear Zone/Clear Zone regulation at 24 CFR §1 Subpart D.

### Summary of Findings and Conclusions

There are no significant environmental impacts expected to result from the proposed action as the project site is already developed. The renovation of Kalihi Valley Homes will be beneficial to the state and residents of Oahu through the provision of quality public housing units and renovation of an existing asset.
ALTERNATIVES TO THE PROPOSED ACTION
Alternatives and Project Modifications Considered [24 CFR 58.40(e), Ref. 40 CFR 1508.9]
(Identify other reasonable courses of action that were considered le selected, such as other sites, design
modifications, or other uses of the subject site. Describe the benefits and adverse impacts to the human environment of
each alternative and the reasons for rejecting it.)

Three alternatives of (1) No Action, (2) Complete Replacement of All Buildings, and (3) Alternative Designs and Selective Demolition Configurations were considered. The alternatives, as well as benefits and adverse impacts to the human environment, are discussed in Section 4.0 and the April 1997 Feasibility Study for Kalihi Valley Homes.

No Action Alternative [24 CFR 58.40(e)]
(Discuss the benefits and adverse impacts to the human environment of not implementing the preferred alternative).

The site would be maintained in its present run-down condition. See Section 4.1.
Mitigation Measures Recommended [24 CFR 58.40(d), 40 CFR 1508.20]
(Recommend feasible ways in which the proposal or external factors relating to the proposal should be modified in order to eliminate or minimize adverse environmental impacts.)

The following conditions and safeguards should be implemented in order to minimize any potential adverse environmental impact:

1. Soils and grading: See section 3.3.
2. Surface water and drainage: See section 3.4.
3. Archaeological - cultural resources: See section 3.6.
4. Roadways and traffic: See section 3.8.
5. Air quality and noise: See section 3.9.

Additional Studies Performed
(Attach studies or summaries)

Draft Environmental Assessment, 4/99
Feasibility Study for Kalihi Valley Homes, 4/97
Darnes & Moore, Preliminary Geotechnical Investigation Recommendations – Proposed Retaining Wall, Slope, and Roadway Repair

List of Sources, Agencies and Persons Consulted [24 CFR 1508.9(b)]

See Section 1.4 of Environmental Assessment
Section 1.0

Introduction
1.0 INTRODUCTION

1.1 PURPOSE OF THE DOCUMENT

This Environmental Assessment (EA) has been prepared for the State of Hawaii Housing and Community Development Corporation of Hawaii. The proposed action calls for the use of State and Federal funds from the Hawaii Housing Finance and Development Corporation for the purpose of the construction of housing in accordance with the National Environmental Policy Act of 1969, as amended, and the Environmental Review Procedures, as regulated under 34 CFR Part 58.

1.2 PROJECT INFORMATION SUMMARY

Project Name: Kalihi Valley Homes Site & Dwelling Improvements

Applicant: State of Hawaii
Housing and Community Development Corporation
677 Queen Street, Suite 300
Honolulu, Hawaii 96813
Contact: Mr. Stanley T. Fujimoto
Telephone: 808-587-3179

Agent: Group 70 International, Inc.
925 Bethel Street, Fifth Floor
Honolulu, Hawaii 96813
Contact: Ralph E. Portmore, AICP
Telephone: 808-523-5866

Accepting Authority: Governor, State of Hawaii

Project Location: Kalihi Valley, Honolulu, Oahu, Hawaii (Figure 1-1)

Landowner: State of Hawaii

Tax Map Key: TMK: 1-3-22: 1 (Figure 1-2)

Land Area: 24.426 acres (1,063,997 sq. ft.)

Zoning: A-2 Medium Density Apartment District (1,060,378 sq. ft.)
P-2 General Preservation District (3,619 sq. ft.)

City and County of Honolulu
Development Plan: Primary Urban Center DP - Medium Density Apartment

State Land Use District: Urban

1-1
Project Site Tax Map Key 1-3-22:01
Kalihi Valley Homes
KALIHI VALLEY HOMES -- SITE & DWELLING IMPROVEMENTS

• Final Environmental Assessment •

1.3 OVERVIEW OF THE PROPOSED PROJECT

Kalihi Valley Homes is a federally subsidized, state public housing project that was designed and constructed during 1952-54 for the Hawaii Housing Authority (since reorganized as the Housing and Community Development Corporation of Hawaii (HCDCH)) to provide a total of 400 single- and multi-bedroom public housing units throughout 45 buildings. The Kalihi Valley Homes public housing area (referred to also as "project site") is located along the slope of Kauahuli Ridge on the northwest side of Kalihi Valley. The project site has frontage along Kamehameha IV Road and Likelike Highway.

Minor repairs and alterations have been made to the units over the years. A new Community Center facility was constructed in 1973. Some of the larger modernization and improvement projects throughout the buildings have included kitchen and bath renovations in 1974, window frames and screens replacement in 1976, and rewiring of the units' interiors in 1987.

In 1997, Group 70 International, Inc. was retained by the HCDCH to perform a facility and building systems evaluation of the existing Kalihi Valley Homes project. The work included a qualitative analysis of the buildings, site, infrastructure, and utility systems. The objectives of the evaluations were to identify obvious and manifest shortcomings related to each element, and recommend corrective actions respectively through both renovation and replacement options. In addition to on-site assessments, the project team researched records and codes and conducted interviews with the resident managers.

The findings of the systems evaluation were summarized in a Feasibility Study for Kalihi Valley Homes (April 1, 1997). The study outlines the relative advantages and disadvantages, as well as costs, of complete building replacement as compared to renovation of the existing buildings. Later in 1997, it was concluded by HCDCH that a phased renovation program of the buildings' exteriors and interiors, various site improvements and selective demolition would be implemented rather than a complete replacement of all of the housing unit buildings.

The renovation project provides for the demolition of eleven buildings (99 units) to create significant areas of open space to enhance the overall quality of the housing area, provide play space for children and reduce the project density to a more desirable 12 units per acre. Repairs that are planned for the dilapidated units include new roof structures; the replacement of doors, windows, hardware, interior walls, kitchen and bathroom counters, cabinets, fixtures and fans; new exterior and interior paint; and new flooring. Other elements of the project include the construction of a new Community Center facility, re-pavement of the existing parking lots and drive ways, installation of retaining walls in areas that experience soil stability problems, and improvements related to Americans With Disabilities Act compliance requirements. A more detailed project description is provided in Section 2.0.

HCDCH has submitted a 5-year plan and requested funding totaling $17,700,000 from the U.S. Department of Housing and Urban Development's (HUD) Comprehensive Grant Program to design and construct architectural, structural, mechanical, electrical, roadway, utility, and site improvements to the Kalihi Valley Homes project. No State funds will be expended. The renovation of the Kalihi Valley Homes public housing project and creation of meaningful open
areas within the site will serve as a model example of reinvestment in public housing and redevelopment aimed to increase the quality of life.

1.4 AGENCIES CONTACTED DURING THE PRE-CONSULTATION AND DRAFT EA REVIEW PERIODS

Listed below are the agencies and other parties contacted regarding the proposed project prior and subsequent to publication of the Draft EA. The Housing and Community Development Corporation of Hawaii is the lead agency and grantee for this proposed action. The Office of the Governor of the State of Hawaii is the responsible entity for the environmental review.

Those contacted during the pre-consultation period were:

Federal Agencies
U.S. Department of Housing and Urban Development

State Agencies
Housing and Community Development Corporation of Hawaii
Department of Health, Office of Environmental Quality Control (OEQC)
Department of Land & Natural Resources, Historic Preservation Division
Department of Transportation

City & County of Honolulu Agencies
Board of Water Supply
Department of Planning & Permitting
Department of Transportation Services

Other Parties
Kalihni Valley Tenants Association

State Agencies
Department of Health, Director's Office
Department of Land and Natural Resources:
Division of Forestry and Wildlife
Land Division
Office of Hawaiian Affairs

City & County of Honolulu Agencies
Department of Environmental Services
Fire Department
Police Department

1-5
1.5 CONTENTS OF THE FINAL ENVIRONMENTAL ASSESSMENT

This Environmental Assessment evaluates the potential impacts of the proposed Kalihi Valley Homes Renovation project on the natural and human environment. This document is presented in six sections. Section 1.0 contains the introduction and project overview. Section 2.0 describes the proposed project and Section 3.0 addresses the environmental, social and economic setting of the proposed project. Alternatives to the proposed project are presented in Section 4.0. A review of the appropriate existing State and County policies and plans is contained in Section 5.0. Section 6.0 contains a statement of anticipated determination, findings and reasons supporting the anticipated determination. References used in the preparation of this document are listed in Section 7.0. Section 8.0 provides copies of letters commenting on the Draft EIS and the responses to those letters.
Section 2.0

Project Description
2.0 PROJECT DESCRIPTION

2.1 PROJECT LOCATION AND SITE CHARACTERISTICS

Kalihi Valley Homes is a federally subsidized state public housing project that was designed and constructed for the Hawaii Housing Authority (since reorganized the Housing and Community Development Corporation of Hawaii (HCDCH)). Completed in 1953, the project consists of 400 public housing units in one, two, three, four, and five bedroom configurations throughout 45 buildings on approximately 24 acres of land. The project site also contains a 4,717 square foot office/maintenance building and a 10,179 square foot Community Center. (Figure 2-1)

The project site, which fronts Likelike Highway and Kamehameha IV Road, is situated at the base of the Kahauiki Ridge and is bordered by residences to the northeast and Kaewai Stream to the southwest. To the southeast, across Likelike Highway, are single- and multi-family residences, while across Kamehameha IV Road is a mix of uses including a large storage building and Kaewai Elementary School. Along the site’s mauka/northwest boundary toward the ridge is property owned by the City and County of Honolulu Board of Water Supply. Further mauka of the site is the State Forest Reserve Boundary and the Fort Shafter Military Reservation.

The buildings are situated parallel to the overall ground slope and are constructed on narrow pads with typical slopes ranging from approximately 5:1 to 2:1 in between building pads. Almost every slope between building pads has a retaining wall at its base. The retaining walls, some of which have failed in many areas, vary in height from 16 inches up to eight feet. The entire housing area is surrounded by a 6-foot high chain link fence.

The project site has two access driveways, one through a manned entry way on Kamehameha IV Road, and the second an unmanned one-way exit onto Likelike Highway. Kalena Drive runs along the interior frontage of the project site and links the two entrance driveways. Municipal bus service traverses southeast (mauka) on Kalena Drive with stops before and after the two driveways. Almost all of Kalena Drive is in an extremely deteriorated condition, likely exacerbated by bus traffic.

Mauka of Kalena Drive are two smaller interior access roads, Kalanuu Street and Kalaiwa Way, which provide access to the buildings and their consolidated parking areas that are situated more interior to the site. The center portion of Kalanuu Street also shows high wear due to subterranean seepage beneath the upslope retaining walls. Sidewalks throughout the project have been uplifted or dropped due to movement of the expansive soils.

Parking lots, sidewalks, and non-electrical utilities have not been significantly modified since the original construction and are in very poor condition. Sewage overflows and flooding have occurred throughout the units at the lower makai end of the site.
2.2 DESCRIPTION OF THE PROPOSED PROJECT

The 46-year-old Kalihi Valley Homes public housing project is one of the State's oldest and is in need of renovation. It was originally constructed in 1954 with an average life expectancy of 20 years. The proposed project provides for the phased renovation of 301 dwelling units and phased demolition of 11 buildings containing 99 dwelling units. The existing and proposed site plan is shown in Figure 2-1. Of the remaining 34 buildings, the interiors will be gutted and replaced with new fixtures and furnishings. The existing Community Center building and administration building will be demolished and replaced with one building.

The project will be designed and constructed in multiple phases that are anticipated to take approximately eight to ten years. The total project cost is estimated to be approximately $47,000,000. Funding for the project is made possible through the U.S. Department of Housing and Urban Development's Comprehensive Grant program which provides funding to modernize existing housing units. No State funds will be expended. The project's components and phasing are discussed in greater detail in the following sections.

2.2.1 Phased Building Renovation and Demolition

Buildings - In general, the building structures are generally in good and sound condition. However, limited structural repairs are needed and will be made to existing residential unit walls and concrete floor slabs where cracks are evident. The most visually significant renovation work will involve the construction of a new sloped-roof system for all of the buildings. Figure 2-2 depicts the existing and proposed exterior building elevations. Window and door locations will be modified and new windows and exterior and interior doors installed. Exterior and interior surfaces will be painted and resilient flooring installed. The interior of all units will be gutted, selected interior walls will be removed and new interior walls will be installed. New finishes and fixtures will be provided throughout the renovated units, including new kitchen and bathroom counters, cabinets, and fans.

The project also proposes the phased demolition of 11 of the 45 existing buildings to provide significant open space and recreation areas interspersed throughout the housing development. The courtyard-like open areas will create spaces for picnic, fitness and children's play areas (Figure 2-3). The reduction in units will lower the project density from 16 units per acre currently to a more desirable target of 12 units per acre. The U.S. Department of Housing and Urban Development's (HUD's) resident relocation guidelines will be followed. Existing residents will be provided alternative housing in another state housing project or Section 8.
Existing and Proposed Exterior Elevations

Kalihi Valley Homes

Figure 2-2
View Looking Mauka

Large Open Space at Mauka End

Conceptual Views - Open Space

Kalihi Valley Homes

Figure 2-3
funding to subsidize market rent. It is likely that, throughout the period during which the phased renovation and demolition of units is being done, some vacancies will occur through attrition and residents may then be able to relocate within the Kalihi Valley Homes project.

The existing one-story office/maintenance building was constructed in 1953. A one-story addition to the makai-end of the building was completed in 1955. The existing two-story Recreation Center building and play court were constructed in 1974. These buildings are programmed for demolition in a later phase and will be replaced with a new three-story building that will house both functions.

*Retaining Walls* - Existing concrete rock masonry (CRM) retaining walls between the buildings throughout the site are in fair condition and will remain. Concrete masonry unit (CMU) retaining walls have been installed where localized landslides have occurred in between buildings. These supplemental retaining walls have typically been constructed only across the width of a past slide rather than as continuous building-length walls between walkways. Subsequently, repeated landslides have occurred adjacent to these short, discontinuous walls again after construction. Numerous un-mortared cobble-sized rock masonry walls have been constructed by residents or maintenance staff to help prevent these unstable slopes from collapsing onto the rear terraces.

Selected areas of the existing CRM and low CMU retaining walls will be demolished and reconstructed. Other existing CMU and CRM walls will have weep holes drilled in them to improve drainage. A portion of the existing loose rocks walls will also be reconstructed.

The area currently occupied by buildings #19, #20, #21 and #22, the existing Recreation Building and office/maintenance building - all of which are slated for demolition - will be regraded and new retaining walls will be constructed when the new Community Center facility is completed.

### 2.2.2 Utilities and Lighting

*Drainage System* - Off-site drainage from the higher elevation land mauka of the site is intercepted by a four-foot wide concrete-lined trapezoidal ditch located within the Board of Water Supply's (BWS's) adjoining watershed property (TMK 1-3-22: 2 and 4). The ditch extends approximately 2,000 feet from the vicinity of Building #36 in a southwesterly (makai) direction to Kaewai Stream. The BWS is responsible for maintaining this interceptor ditch as necessary to minimize the possibility that an obstruction could cause flood damage or personal injury in Kalihi Valley Homes or other nearby developments.
Secondary interceptor ditches within the project site and up-slope of Buildings 7, 10, 16, 19, 24, 27, 32, 36, and 41 provide additional protection. The on-site drainage lines discharge into the City and County of Honolulu’s municipal drainage system at four different points along Kamehameha IV Road and Liklikely Highway. These ditches will be repaired as necessary and building down spouts will be connected to storm drains in order to minimize potential adverse impacts of on-site drainage.

Sewerage System - The existing sewerage system connects to the City and County of Honolulu’s municipal system at a single connector located in front of the main driveway along Kamehameha IV Road. Sewage backups have been reported within the units of Buildings 1, 2, 3, 33, and 45. The backups mainly occur in the 8-inch main along Kalena Drive.

The renovation project will replace the existing 8-inch sewer lines along Kalena Drive with a 10-inch line. An existing 8-inch line between Building #1 and #15 will be replaced with a 12-inch line. All existing 4-inch and 6-inch sewer laterals will be replaced. A contingency plan will be developed to replace approximately an additional 700 linear feet of 8-inch main throughout the project site.

Water System - Water service is provided through two water meter connection points along Kalena Drive. All galvanized iron water laterals serving the buildings will be replaced with copper or PVC pipes. The fire hydrants connected to the Board of Water Supply’s main on Kalena Drive are off-site and part of the municipal system. Other fire hydrants up-slope of the water meters are part of the Kalihi Valley Homes internal system and will be replaced.

Mechanical Systems - The existing mechanical systems are in poor condition and will be replaced or repaired. All existing plumbing fixtures will be removed and replaced with new water conserving fixtures. Other new interior elements to be replaced include bathroom exhaust fans and re-circulating-type range exhaust hoods. Each unit will have a new electric water heater and appurtenant piping, as well as a new stove and refrigerator. Electrical and water hook-ups will be provided for washers and dryers.

Electrical Systems - The electrical service for the complex is owned and maintained by Hawaiian Electric Company (HECO). The overhead service is tapped from a 12.47 KV, three phase, primary circuit extending from Kamehameha IV Road into the housing complex. The overhead service is distributed throughout the complex to step-down distribution transformers mounted to utility poles.

Throughout the project site, Hawaiian Electric Company’s electrical overhead distribution and service transformers will be upgraded. Street light poles will be replaced and upgraded to provide greater lighting levels throughout the housing complex. Area light poles for newly created open space will be installed. The existing exterior walkway luminaries will remain. A variety of the dwelling units’ electrical system components and fixtures will be upgraded or replaced to provide safety and energy efficient features.
2.2.3 Roadways and Parking

The interior roadways, parking lots and sidewalks throughout the project have not been significantly modified since their original construction and are in various stages of disrepair. Some of the roadways are in extremely deteriorated condition, likely exacerbated by bus traffic. The renovation project calls for the re-paving of all existing roadways and parking areas. This includes the removal of the existing paving materials and sub-base and replacement with a new pavement section. Asphalt paving will be done according to City and County specifications.

Other interior roadway and parking area improvements include the entry roadway and parking lot off of Kamehameha IV Road, which will be reconfigured and completely reconstructed. This will provide for safer queuing and storage conditions for vehicles entering from Kamehameha IV Road. Buildings #8A, #9A and #11A are proposed for demolition which will make room for an expanded parking and circulation area at this main entry gateway. A new guard house will be constructed at this Kamehameha IV Road entrance as well.

The existing office/maintenance building’s parking lot and roadway will be removed and replaced with a new parking and circulation roadway for the new Community Center building. The interior connection between Kalena Drive and Kalauuu Street will be realigned and re-built when the new Community Center is constructed. The parking lot access roadway between Buildings #12 and #15 will be eliminated, making Kalaiwa Way a dead-end parking area.

2.2.4 Landscaping

The project site will be landscaped with fruit and flower trees the community can share, such as banana, breadfruit, citrus trees, coconut, kukui, mango, papaya and plumeria trees (Figure 2-4). Landscape features will be provided at the entrance roadways located along Kamehameha IV Road and Likelike Highway. Shade trees will be provided around the larger courtyard-like open space areas. Three “tot lots” and picnic areas will be evenly spaced throughout the development. One fitness area for older children and adults is proposed in the mauka open area surrounded by Buildings #24A, #27B and #33B. Irrigation and plantings will also be provided around the new Community Center when it is constructed. It is envisioned that the front yards of the residents' units could be cultivated as private gardens.

2.2.5 Accessibility Guidelines

The housing project was originally constructed in the 1950’s at which time it was not subject to any design standards for handicap accessibility. The difficult site topography makes it “technically infeasible” to provide accessible routes throughout the entire project. The phased renovation of public areas will apply the design standards of the Americans with Disabilities Act Accessibility Guidelines (ADAAG). These standards will be applied to exterior routes, common areas, common buildings (such as the new Community Center), and parking areas where possible. Renovation of the residential units are covered by Section 504 of the Federal Rehabilitation Act and will follow the design standards of the Uniform Federal Accessibility Standards (UFAS).
Sustainable Building Design

"Sustainability" essentially means meeting the needs of today without compromising the needs of future generations. A "sustainable" building is one that is built to minimize energy use, expense, waste, and impact on the environment. The following techniques, as outlined in the State Office of Environmental Quality Control's "Guidelines for Sustainable Building Design in Hawaii," have been or will be used in the design and construction of this project in order to make it as resource efficient as possible.

A. Team Building
   1. Meetings with Carolyn Ogawa, Shon and Dean Masai of DBEDT, Stephen Meder of UH School of Architecture, and Stan Fujimoto of HCDCH, to discuss Sustainable Building Design.
   2. Meetings with the various consultants on the project to identify project and environmental goals.

B. Building Design
   1. Renovating existing buildings instead of demolishing and constructing new buildings.
   2. Planning for a comfortable and healthy work environment, including the provision of inviting outdoor spaces, wherever possible.
   3. For natural cooling/blending
      a) Reducing the amount of heat gain in buildings and vents
      b) Designing for passive cooling, control of building surfaces, and tree planting on side buildings and paved areas.

C. Site Design
   1. Creating sites with care and reduction of impervious surfaces.
   2. Maximizing the area required for the building footprint.
   3. Consolidating utilities and infrastructure along common corridors to reduce unnecessary site degradation, minimize cost, and improve efficiency.

D. Energy Use
   2. Installing renewable energy technologies or provisions for future installation of solar water heaters.
   3. Use of energy efficient equipment with the desired light sources and color rendering indices.
   4. Reducing light absorption on surfaces by selecting colors and finishes with high reflectance ratios and avoid glare.

E. Water Use
   1. Installing water efficient fixtures as required by the Uniform Plumbing Code.
F. Building Materials and Solid Waste Management

1) Using materials where possible that require limited or no application of finishing or surface preparation;
2) Inspecting and where needed abating asbestos and lead paint in existing buildings.

2.3 PROJECT DEVELOPMENT COSTS AND PHASING

The Kalihi Valley Homes project will be designed and constructed in multiple phases. An initial five-year plan and funding request of $20,750,500 has been submitted to the U.S. Department of Housing and Urban Development’s Comprehensive Grant Program. The total construction time for the entire housing area is anticipated to take eight to ten years and total construction cost is estimated at approximately $46,815,800. The initial five-year funding plan is outlined in Table 2-1 below and the related development phases are depicted in Figure 2-5. Final cost figures and phasing will be subject to Federal funding approval. No State funds will be expended.

<table>
<thead>
<tr>
<th>TABLE 2-1</th>
<th>KALIHI VALLEY HOMES – 5-YEAR PLAN</th>
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<tr>
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<td>PROJECT FUNDING AND PHASING</td>
</tr>
<tr>
<td>Phase I</td>
<td>1997–2001</td>
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<tr>
<td>Phase II</td>
<td>2001–2002</td>
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<td>Phase III</td>
<td>2002–2003</td>
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<td>Phase IV</td>
<td>2003–2004</td>
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Section 3.0

Description of the Environmental Setting, Potential Impacts, and Mitigative Measures
3.0 DESCRIPTION OF THE ENVIRONMENTAL SETTING, POTENTIAL IMPACTS, AND MITIGATIVE MEASURES

Addressed below are the environmental setting, potential impacts and mitigative measures for the proposed Kalihi Valley Homes Renovation project.

3.1 CLIMATE

Existing Conditions - The climate of Oahu is mild and subtropical with prevailing northeast trade winds. Average daily minimum and maximum temperatures range from the low 60’s (degrees Fahrenheit) to the low 90’s, depending upon the time of day and the season. Precipitation is seasonal with the most rainfall typically occurring from October through April. Annual rainfall on Oahu varies with elevation and geography. Rainfall averages over 120 inches per year at approximately 2,700 foot elevation at the top of Kalihi Valley near the ridge line of the Koolau Mountain Range.

Anticipated Impacts and Mitigative Measures - The proposed project will have no effect on climatic conditions. Therefore, no mitigative measures are required.

3.2 TOPOGRAPHY

Existing Conditions - The project site is located at the foot of Kauhauiki Ridge and ranges in topographic elevation from approximately 206 feet to 256 feet above mean sea level. It has been developed as a housing project for over 40 years. The average slope of the terrain varies from 2:1 to 1-1/2:1. The buildings are located on narrow pads parallel to the overall ground slope with typical slopes ranging from approximately 5:1 to 2:1 in between building pads and retaining walls.

Anticipated Impacts and Mitigative Measures - The proposed Kalihi Valley Homes renovation project will not substantially alter the overall existing topography of the project site. Grading will take place in phases where buildings are to be demolished to create open space and recreation areas, including the centrally located open space of the new Community Center building. Existing interior streets and parking areas may need to be re-graded when these areas are configured and resurfaced. No substantial fill or excavation is being proposed for the project. Mitigative measures related to soils and grading are described in the following section.

3.3 SOILS AND GRADING

Existing Conditions - Dames & Moore conducted a soil investigation on the project site (October 30, 1998). The purpose of this investigation was to determine the nature and
engineering properties of the soils underlying the site, and to provide preliminary geotechnical recommendations for the design of site improvements and site grading. The following is a summary of the findings.

The soil overlying the Koolau basalt consists of colluvial and alluvial soils. Fifteen borings drilled indicate that the recent colluvium and alluvium consists of basalt sand, gravel, cobbles, and boulders mixed in with a gray to brown silty highly expansive clay, commonly known as adobe. The thickness of the recent alluvium is in the order of 5 to 14 feet. Residual soils and highly to slightly weathered basalt were encountered below the colluvium and alluvium. The residual soil and weathered basalts consist of brown to light brown very dense silty, sandy, gravelly soil. Bed rock is located below the residual.

*Anticipated Impacts and Mitigative Measures* - The renovation work on the residential buildings requires little disturbance of the existing soils. Improvement to or extension of exterior lanais will be constructed on non-expansive soils and heavily reinforced to minimize any impact from heaving soils. Construction of the new Community Center building will utilize pile foundations to support the building, and ground floor slabs will be constructed over non-expansive soil. New retaining walls will be constructed over concrete footings designed to minimize structural cracks and weakening. Existing retaining walls will have weep holes and substrains installed to alleviate movement and drainage problems.

All grading operations will be conducted in compliance with dust and erosion control requirements of the City and County of Honolulu Grading Ordinance. A Grading Permit will be obtained from the City and County of Honolulu prior to beginning construction. During Grading Permit review and approval, the grading plans for the site are reviewed by the City and specific conditions may be attached at that time.

Primary fugitive dust control methods that will be implemented include regular watering of exposed soil areas, good housekeeping on the job site, and prompt landscaping, covering or paving of bare soils in areas where construction is completed. The impact of construction activities on soils will be mitigated by practicing strict erosion control and dust control measures, particularly those specified in the following:

- City and County of Honolulu Grading Ordinance
- State of Hawaii, Department of Health, Water Quality Standards, Chapter 37-A, Public Health Requirements (1968);

3.4 SURFACE WATER AND DRAINAGE

*Existing Conditions* - The existing flood zones were reviewed using the National Flood Insurance Program, Flood Insurance Rate Map (FIRM). The project site is located outside of any designated flood area and, according to the FIRM, is within "Other Areas Zone X: Areas determined to be outside 500-year flood plain."
Up-slope off-site runoff is intercepted by a ditch within the mauka Board of Water Supply watershed area and by secondary interceptor ditches located just within the property’s mauka boundary. The downslope side walls have suffered impact damage from boulders rolling down the hill. Large boulders have filled the ditch in the past causing flooding of residential units. Other secondary ditches were observed to be functional, but appeared susceptible to inundation by eroded material, vegetation, and the collapse of protective un-mortared rock walls. Concrete terraces adverse to grade and retaining walls collect drainage at the rear of each building and convey water through inlets that are piped or channeled downslope between buildings. Inlet grating is frequently clogged with debris.

**Anticipated Impacts and Mitigative Measures** - The renovation project will improve on-site drainage conditions through improvements to drainage infrastructure and continued maintenance of all existing drainage structures. The on-site secondary interceptor ditches will be improved. Small ditches along the top of steeply sloped banks or at building downsprouts will be constructed and connected to existing storm drains. These improvements together with existing construction site measures described in Section 2.2.4 will help limit new conditions that may cause the project to exacerbate landslides within the project area.

### 3.5 FLORA AND FAUNA

**Existing Conditions** - The project site has essentially been fully developed since the 1950’s. According to a site visit performed by Walters Kimura Motoda in October 1998, there does not appear to be any endangered plant species. The existing vegetation observed throughout the housing project consists of grassy areas and tree varieties such as: Banana, Christmas Berry, Citrus, Coconut Palm, Guava, Kukui, Monkeypod, Opiuma, Shower, Singapore Plumeria, and Tecoma.

The project site is located within a developed urban setting. The natural fauna of the housing project site consists of common birds, insects, and domesticated animals (pets). There are no known existing wetlands, wildlife sanctuaries or refuges adjacent or in the immediate area of the project.

**Anticipated Impacts and Mitigative Measures** - No rare, endangered, or threatened plant or animal species are presently known to exist on the project site. Improvements to the project site will provide new landscaped areas, trees and plantings which may serve as habitat for area wildlife. The proposed landscape plan includes retaining and/or the planting of tree species including: Banana, Breadfruit, Citrus, Coconut Palm, Hala, Kou, Kukui, Koulu Fan Palm, Mango, Monkeypod, Papaya and Royal Poinciana. No adverse impacts are anticipated, and no mitigative measures are considered necessary.

### 3.6 ARCHAEOLOGICAL AND CULTURAL RESOURCES

**Existing Conditions** - The project site has been subject to considerable construction activity as a result of its development and use as a low income state public housing project for the last 46
years. No significant historical or archaeological features are known to exist within this parcel. The existing site and buildings are not considered historically significant. The project proposes primarily to renovate existing structures. A relatively small portion of the entire site will be disturbed as the proposed eleven buildings are demolished over various phases.

Anticipated Impacts and Mitigative Measures - There are no known archaeological or cultural resources on the project site. In the event that any previously unidentified sites or remains are encountered during site work and construction, work in the immediate area will cease. An archaeologist from the State Historic Preservation Division will be notified and work in the area will be suspended until further recommendations are made for appropriate treatment of archaeological and/or cultural materials.

3.7 LAND USE POLICIES, PLANS AND REGULATIONS

Existing Conditions - Development patterns on Oahu are set by State Land Use District designations, and by the City and County of Honolulu General Plan, regional Development Plans or Sustainable Communities Plans, and zoning district designations. The principal function of these plans and regulations is to specify where land uses such as commercial, residential, industrial, agricultural, open and public areas are permitted. The existing land use designations are briefly summarized below. A more detailed discussion of required permits and approvals for the proposed project is provided in Section 5.0.

State Land Use Designation - The Kalihi Valley Homes parcel is located within the State Land Use Urban District (Figure 3-1). The proposed project does not require a change in State Land Use designation and is a permitted use within the Urban District.

City and County Development Plan - On the City and County of Honolulu’s Primary Urban Center Development Plan Land Use Map, the subject property is designated Medium Density Apartment (Figure 3-2). The project proposes to make site and dwelling improvements and perform selective demolition only within the developed portion of the site. The proposed project is consistent with the Development Plan designation.

City and County Zoning - The developed portion (1,060,378 sq. ft.) of the subject property is designated A-2 Medium Density Apartment on the City and County of Honolulu's Zoning Map (Figure 3-3). A small undeveloped mauka portion (3,619 sq. ft.) is designated P-2 General Preservation. The project proposes to make site and dwelling improvements and perform selective demolition only within the developed portion of the site which is designated A-2 Medium Density Apartment. The undeveloped General Preservation-designated portion of the site will not be disturbed as part of this project. The proposed project is consistent with the Zoning Map designation.

Coastal Zone Management Program - The Kalihi Valley Homes parcel is located approximately one mile inland and is not included within the Coastal Management Area established by the City and County of Honolulu. The project is not categorically consistent with the Hawaiian CZM Program.
State Land Use Districts

Kalihi Valley Homes

Figure 3-1
Primary Urban Center Development Plan Land Use Map

Kalihi Valley Homes

Figure 3-2
Anticipated Impacts and Mitigative Measures - The proposed project is consistent with existing land use designations, therefore there is no need for any change in the existing land use classifications or in the amount of land designated for development. Land use patterns in the area will not change as a result of the proposed action. No mitigative measures are required.

3.8 SURROUNDING LAND USES

Existing Conditions - The Kalihi Valley Homes public housing project provides rental housing for lower income families. The area surrounding the housing project is basically residential except for a few small neighborhood shops and nearby Kaewai Elementary and Dole Intermediate schools.

Anticipated Impacts and Mitigative Measures - The project will create short-term benefits as a result of design and construction employment. Local material suppliers and retail businesses can also be expected to benefit through a multiplier effect from the increased construction activities.

Although over an eight to ten year period there is proposed to be a reduction in the number of residential units from a total of 400 to 301 units, the overall social impacts will be positive. The existing buildings' exteriors and interiors will be significantly renovated and the creation of meaningful open space and recreation areas throughout the development will improve the quality of life for the project's residents.

Meetings with the project residents have been held to discuss the project, and they have expressed their support for the proposed improvements. HUD's Resident relocation guidelines.
3.10 VISUAL RESOURCES

Existing Conditions - The project site is located within a developed urban residential neighborhood. The buildings are located at varying elevations along the base of Kahauiki Ridge of the Koolau Mountain Range. Views from the project site consist primarily of adjacent residential areas, the relatively busy Kamatamaha IV Road and Likelike Highway, Kaliihi Valley and mauka views of the mountains.

Views in Kalihi Valley are characterized by residential neighborhoods and the surrounding mountain ranges. The Kalihi Valley Homes project site is visible from Likelike Highway.

Anticipated Impacts and Mitigate Measures - The proposed project will improve the visual character of the public housing buildings through various exterior improvements, including the construction of house-like pitched roofs in contrast to the existing "boxy" flat roof character of the buildings. Changes to the buildings' exterior scale and design, the creation of open space and recreation areas and the provision of new landscaping will improve the character of the housing project and improve views of the area (Figure 3-4).

3.11 UTILITIES

Existing Conditions
Water - The Board of Water Supply's system supplies potable water to Kalihi Valley Homes through two water meter connection points on Kalena Drive. Improvements to the existing on-site water system will be completed as part of the project's site and dwelling improvements. Because the proposed project will actually decrease the total number of residential units, the existing water supply source is sufficient to service the project.

Wastewater - The sewer system for Kalihi Valley Homes connects to the City and County of Honolulu's municipal system at a single point in front of the housing development's main entrance along Kamehameha IV Road. Some portions of the existing on-site sewer lines will be replaced with larger lines as part of the project's site and dwelling improvements.
Electrical Power - The electrical needs of the project site are serviced by Hawaiian Electric Company. Upgrades to the on-site electrical overhead distribution and service transformers serving the buildings will be completed as part of the project's site and dwelling improvements. Sufficient power to serve the existing housing development is available.

Anticipated Impacts and Mitigative Measures - The demolition of 11 buildings and the exterior and interior renovation of the remaining 301 units will reduce rather than create long-term additional demands for water, wastewater, or electrical services. No mitigative measures are considered necessary.

3.13 ROADWAYS AND TRAFFIC

Existing Conditions - Access to the project site is via a manned entryway fronting Kamehameha IV Road and un-manned exit fronting Likelike Highway. Kamehameha IV Road is maintained by the City and County of Honolulu. According to the Department of Transportation Services, the pavement area of Kamehameha IV Road fronting Kalihi Valley Homes is four lanes and approximately 60 feet wide (approximately 76 foot right-of-way measured on page 29), with two lanes of traffic in each direction. No plans for future road widening of Kamehameha IV Road are designated on the Primary Urban Center Development Plan Public Facilities Map.

There is a major traffic light at the intersection of Likelike Highway with the un-manned Kalihi Valley Homes exit on the Ewa-side and Alu Alu Place on the Diamond Head-side of the Highway. In the vicinity of the project site Likelike Highway is two lanes in each direction along with dedicated turn lanes and auxiliary lanes on each side. The mauka-makai lanes are separated by a median strip. According to the State Department of Transportation (DOT), there are no plans for road improvements. New signals were installed at Alu Alu Place within the last year.
The roadways within the project site are in need of repair; Kalena Drive is the frontage roadway, while Kaauna Street and Kalaiwa Way are roads accessing mauka buildings and parking areas. Kalena Drive is in extremely deteriorated condition, most likely exacerbated by City Bus traffic. All of the interior roadways and parking areas will be re-paved. The main entry roadway off of Kamehameha IV Road will be reconstructed to provide a safer queuing space for vehicles entering the site.

**Anticipated Impacts and Mitigative Measures**

**Construction Period** - All construction work and interior roadway improvements will take place within the boundaries of the project site. Construction activities will be scheduled to avoid unnecessary impacts on traffic. Contractors will be responsible for providing necessary traffic controls and precautions to maintain traffic safety on roadways fronting the project site.

**Future Traffic Flow** - The proposed project is primarily renovation of existing buildings and units. Over a period of eight to ten years, it is proposed that eleven buildings containing a total of 99 housing units be demolished to create open space and recreation areas throughout the project site. Therefore, the traffic associated with Kalihi Valley Homes will decrease over time as the number of housing units decreases. Given the limited impacts and projected continuation of acceptable traffic conditions in the future, no mitigative measures are considered necessary.

### 3.14 AIR QUALITY

**Existing Conditions** - Air quality on Oahu is generally good and relatively low in pollution, except where there are large numbers of vehicles or when weather patterns create stationary air conditions. In accordance with the Clean Air Act, the project site has been certified as achieving or maintaining air quality standards for the State of Hawaii.

The project site is adjacent to Likelike Highway and vehicles traveling on this road contribute to the air pollution levels in that area. However, the area mauka of the development is mountainous and undeveloped and the predominance of northeast trade winds generally create relatively clean air conditions in this area of Kalihi Valley.

**Anticipated Impacts and Mitigative Measures** -

...
If necessary, increased vehicular emissions due to disruption of peak-hour traffic by construction equipment and/or commuting construction workers can be alleviated by moving the equipment and personnel to the site during off-peak traffic hours.

Long-term air quality conditions in the area are not anticipated to change or be substantially different from existing conditions once construction is completed. They could actually improve slightly due to the planned decrease in density. No mitigative measures are considered necessary.

3.15 NOISE

Existing Conditions - The primary noise sources in the area of the project site are related to traffic and urban activities. The proposed project itself will not generate extended periods of unacceptable levels of noise.

Anticipated Impacts and Mitigative Measures - Construction work at the project site will involve activities that may generate an increase in noise levels. However, such exposures will be only a short-term condition, occurring during normal working hours.

Construction vehicles and activities must comply with State Department of Health Administrative Rules, Title 11, Chapter 42 (Vehicular Noise Control for Oahu) and Title 11, Chapter 45 (Community Noise Control for Oahu). The State of Hawaii Department of Health’s noise control regulation requires a permit for construction activities that emit noise in excess of 95 decibels.Mitigative measures to minimize construction noise will include the use of mufflers to suppress loud equipment and limitations on the hours of heavy equipment operation.

The primary long-term or on-going source of noise in the area of Kalihi Valley Homes is the noise generated by traffic on Kamehameha IV Road. Day/night average noise levels are projected to range from 50 to 60dB in the immediate vicinity of the proposed apartment sites. Although these two roadways IS stream, noise from the Kalihi Valley project is limited by the 40 decibel level, recommended by the U.S. Department of Housing and Urban Development, noise levels are less than that in all other project areas.

The proposed noise attenuation measures are considered necessary for long-term and will not be negatively impacted by the future development of the area. The proposed noise attenuation measures are recommended to be implemented to minimize any significant increase in noise levels due to construction activities. The cost of the proposed noise attenuation measures is estimated to be $100,000.
Main Entry on Kamehameha IV Road

View from Likelike Highway

Conceptual Views - Entry & Likelike Highway

Kalihi Valley Homes
Section 4.0

Alternatives to the Proposed Action
4.0 ALTERNATIVES TO THE PROPOSED ACTION

This Environmental Assessment evaluates three alternatives to the proposed project described in Section 2.0. The alternatives include:

- No Action Alternative
- Complete Replacement of All Buildings
- Alternative Designs and Configurations

4.1 ALTERNATIVE 1: NO ACTION

The No Action alternative would maintain the site in its present run-down condition. This is considered unacceptable because of the current condition of the low-income rental units at Kalihhi Valley Homes and the availability of funding to make improvements to this project. Although the No Action Alternative would have no adverse environmental impacts, no-action at the project site would lack the numerous positive socio-economic benefits which this project will provide to the community and the State. This alternative would not meet the Housing and Community Development Corporation of Hawaii’s mandate to provide safe, decent and sanitary housing at this site.

4.2 ALTERNATIVE 2: COMPLETE REPLACEMENT OF ALL BUILDINGS

The April 1997 Feasibility Study for Kalihhi Valley Homes report analyzed the relative advantages and disadvantages, as well as the associated costs of a complete replacement program of all buildings compared to a renovation approach of the buildings. It was concluded by the Housing and Community Development Corporation of Hawaii (HCDCH) that a phased renovation program of the buildings’ exteriors and interiors, various site improvements and selective demolition of eleven buildings would be implemented rather than a complete replacement of all of the buildings. Limited funding considerations and impacts to residents were factors in the decision.

4.3 ALTERNATIVE 3: ALTERNATIVE DESIGNS AND SELECTIVE DEMOLITION CONFIGURATIONS

Alternative building and unit designs, as well as variations in the number and location of buildings to be demolished have been considered by the project designer and the HCDCH. A total of three alternative demolition configurations were evaluated (Figure 4-1). Demolition Alternatives #1 and #2 in Figure 4-1 proposed to remove seven buildings (63 units) in each scenario and retain the existing Community Facility building. Although Alternative #3 eliminates eleven buildings (99 units), it was selected as the preferred alternative by HCDCH because it created significant open areas spaced throughout the housing project and included the construction of a new Community Facility building.
Section 5.0
Required Permits and Approvals
5.0 REQUIRED APPROVALS AND PERMITS

5.1 STATE LAND USE DESIGNATIONS AND CONTROLS

The subject property is located within the State Land Use Urban District. The State of Hawaii Land Use Law regulates the classification and uses of lands in the State to accommodate growth and development, and to retain the natural resources of the area. All State lands are classified by the State Land Use Commission, with consideration given to the General Plan of the County, as either Urban, Rural, Agricultural, or Conservation. The proposed project does not require a change in State Land Use designation; it is a permitted use within the Urban District.

5.2 CITY & COUNTY OF HONOLULU LAND USE DESIGNATIONS AND CONTROLS

5.2.1 Primary Urban Center Development Plan

The subject property is designated Medium Density Apartment on the City and County of Honolulu’s Primary Urban Center Development Plan Land Use Map. The project proposes to make site and dwelling improvements and perform selective demolition only within the existing developed portion of the site.

The City and County of Honolulu’s Development Plans and Sustainable Communities Plans provide direction for a region’s orderly future growth within the framework of the General Plan, and serve as guides for specific land use and development decisions. The Primary Urban Development Plan Land Use Map designation for the entire project site is Medium Density Apartment. The proposed project is consistent with this Development Plan designation.

5.2.2 Zoning Districts

The purpose of the Land Use Ordinance for the City and County of Honolulu is to implement the General Plan and regional Development Plans’ policies for growth and development through the regulation of the uses permitted within different zoning districts. The developed portion (1,060,378 sq. ft) of the subject property is designated A-2 Medium Density Apartment on the City and County of Honolulu’s Zoning Map. A small undeveloped portion (3,619 sq. ft.) is designated P-2 General Preservation.

The proposed project is consistent with the Zoning Map designations. The project proposes to make site and dwelling improvements and perform selective demolition only within the developed portion of the site, all of which is designated Medium Density Apartment. The undeveloped General Preservation-designated portion of the site will not be disturbed.
5.3 REQUIRED APPROVALS AND PERMITS

The proposed project is consistent with and supports the State and the City and County of Honolulu land use designations of the subject property. **No approvals or changes to existing land use plans and regulations are required.**

Only the following are required to proceed with this project:

- The acceptance of this Final Environmental Assessment;
- Ministerial permits, such as demolition, grading and building permits, etc.

These will be obtained prior to the initiation of construction.
Section 6.0

Findings and Reasons Supporting
Anticipated Determination
6.0 FINDINGS AND REASONS SUPPORTING ANTICIPATED DETERMINATION

6.1 ANTICIPATED DETERMINATION

In accordance with the National Environmental Policy Act, Chapter 344, HRS and the State Department of Health Administrative Rules, Section 11-200 (Environmental Impact Statement Rules), an applicant or agency must determine whether an action may have a significant impact on the environment. Section 11-200-12 of the EIS Rules establish “significant criteria” to be used as a basis in making the determination and whether significant environmental impacts will occur. According to Section 11-200-12, an action shall be determined to have a significant impact on the environment if it meets any one of the following criteria:

(1) Involve an irrevocable loss or destruction of any natural or cultural resources.

The proposed project involves the renovation and selective demolition of an existing public housing project. There is no significant destruction of existing natural or cultural resources. As previously noted, no significant archaeological or historical sites are known to exist within the project site. If during the course of construction any cultural or archaeological remnants are unearthed, the Department of Health or the State Historic Preservation Division shall be notified and their treatment will be conducted in strict compliance with SHPD requirements.

(2) Curtail the range of beneficial uses of the environment.

The site has been developed as a State public housing project since 1953. The project site is located within a residential neighborhood. To return the site to a natural environmental condition is not practical from both an environmental and economic standpoint.

(3) Conflict with the State’s long-term environmental policies or goals and guidelines as expressed in Chapter 344, HRS, and any revisions thereof and amendments thereto, court decisions, or executive orders.

The proposed project is consistent with the environmental policies established in Chapter 344, Hawaii Revised Statutes.

(4) Substantially affects the economic or social welfare of the community or State.

The proposed project is an investment in the renovation and improvement of an existing State public housing project asset and will improve the economic and social welfare of the
community and State. The site and dwelling improvements will not negatively or significantly alter the existing residential area, nor will it contribute to population growth. The improvements will provide the residents with a higher quality living environment.

(5) **Substantially affects public health.**

Insignificant or undetectable impacts to public health may be affected by air and noise impacts during construction, but will be mitigated by appropriate control measures. The long-term benefits to positive social and quality of life implications associated with the project outweigh the temporary negative impacts. Overall, impacts will be significantly positive in terms of public health through the provision of improved public housing and play areas as compared to the “no action” alternative.

(6) **Involves substantial secondary impacts, such as population changes or effects on public facilities.**

As this is an existing project, the proposed improvements will not create significant secondary impacts such as population changes or effects on public facilities. The site and dwelling improvements to Kalihi Valley Homes will reduce the total number of public housing units from 400 to 301 in order to provide more open space and play areas. This will also lower the overall density of the project site to a level comparable with other State public housing projects.

Design and construction work will generate indirect and induced employment opportunities and multiplier effects, but not at a level that would generate any significant expansion. The short-term employment impacts will be beneficial to the local economy.

(7) **Involves a substantial degradation of environmental quality.**

The proposed project will consist of site and dwelling improvements on existing developed land. The design of the improvements, creation of new open space and provision of additional landscaping will together significantly improve the overall visual quality and appearance of the development as viewed from outside and within the site.

(8) **Is individually limited but cumulatively has considerable effect upon the environment or involves a commitment for larger actions.**
(9) Substantially affects a rare, threatened or endangered species, or its habitat.

There are no endangered plant or animal species located within the project site.

(10) Detrimentally affects air or water quality or ambient noise levels.

Short-term effects on air, water quality or ambient noise levels during construction will be mitigated by compliance with City and County of Honolulu and State Department of Health rules which regulate construction-related activities. After development, improvements to the site and related infrastructure should have positive impacts on air and water quality, and on ambient noise levels.

(11) Affects or is likely to suffer damage by being located in an environmentally sensitive area such as a flood plain, tsunami zone, beach, erosion-prone area, geologically hazardous land, estuary, fresh water, or coastal waters.

The existing developed project site is not located in an environmentally sensitive area. The proposed project will not impact any portion of the undeveloped ridge area mauka of the project site.

(12) Substantially affects scenic vistas and view-planes identified in county or state plans or studies.

The entire proposed project area has been developed as a State public housing project since 1953. The planned improvements will not substantially affect scenic vistas or view planes. The proposed improvements to the existing buildings will enhance the character of the housing and therefore enhance off-site views of the project area. The creation of open space and play areas within the project site will beneficially impact views from off-site and from within the project property.

(13) Require substantial energy consumption.

Construction of the project will not require substantial energy consumption relative to other similar projects. After the project is completed, energy consumption should be reduced through efficiencies gained by improving existing utilities and using modern energy efficient appliances and fixtures.

6.2 REASONS SUPPORTING THE ANTICIPATED DETERMINATION

As stated above, there are no significant environmental impacts expected to result from the proposed action as the project site already developed. A Finding of No Significant Impact (FONSI) is anticipated. The renovation of Kalihi Valley Homes will be beneficial to the State and residents of Oahu through the provision of quality public housing units and renovation of an existing State asset.
Section 7.0
References
7.0 REFERENCES


Federal Emergency Management Agency: FIRM Flood Insurance Rate Map City and County of Honolulu, Panel Number 150001-0112C; Prepared for the National Flood Insurance Program, September 28, 1989


Rider Hunt: Conceptual Cost Estimate for Kalihi Valley Homes Redesign; November 16, 1998

U.S. Department of Agriculture Soil Conservation Service: Soil Survey of Islands of Kauai, Oahu, Maui, Molokai, and Lanai, State of Hawai'i; 1972

Section 8.0
Draft EA Comment and Response Letters
September 3, 1999

Mr. Ralph E. Portmore, AICP
Group 70 International, Inc.
925 Bethel Street, 5th Floor
Honolulu, Hawaii 96813-4307

Dear Mr. Portmore:

Subject: Kalihi Valley Homes Draft EA

The Department of Education has no comment on the subject draft environmental assessment given that the proposed renovation will result in an overall decrease in housing units.

Thank you for the opportunity to respond.

Very truly yours,

[Signature]

Paul G. LeMahieu, Ph.D.
Superintendent of Education

cc: A. Suga, OBS
    P. Dang, HDO
    S. Fujimoto, HCDCH

AN AFFIRMATIVE ACTION AND EQUAL OPPORTUNITY EMPLOYER
September 30, 1999

Paul G. LeMehieu, Ph.D.
Superintendent of Education
State of Hawaii
P.O. Box 2360
Honolulu, HI 96804

Subject: Kalili Valley Homes – Site and Dwelling Improvements
Draft Environmental Assessment

Dear Dr. LeMehieu:

Thank you for your September 3, 1999 letter regarding your review of the Draft Environmental Assessment (Draft EA) for the above-referenced project. We acknowledge your statement that you do not have any comments to offer, given that the proposed renovation will result in an overall decrease in housing units.

Your letter and this response letter will be included in the Final EA. We appreciate your taking the time to review this project.

Sincerely,

GROUP 70 INTERNATIONAL, INC.

Ralph Portmore, AICP
Principal
Mr. Ralph E. Portmore, AICP  
Principal  
Group 70 International, Inc.  
925 Bethel Street, Fifth Floor  
Honolulu, Hawaii 96813-4307  

Dear Mr. Portmore:  

Subject: Draft Environmental Assessment  
Kalani Valley Homes - Site & Dwelling Improvements  

Thank you for allowing us to review and comment on the subject project. We have the following comments to offer:  

Asbestos Concerns  

Because this project includes demolition and renovation activities, the Federal Register, 40 CFR Part 61, National Emission Standards for Hazardous Air Pollutants, Asbestos NESHAP Revision, Final Rule, November 20, 1990, requires inspection of all affected areas to determine whether asbestos is present.  

Under the NESHAP regulation, the owner or operator of the project would be required to file a Notification of Demolition/Renovation ten working days prior to the demolition of each building or the disturbance of regulated asbestos-containing material. All regulated quantities and types of asbestos-containing materials would be subject to emission controls, proper collection, containerization, and disposal at a permitted landfill.  

Lead-Based Paint Concerns  

All lead-based paint that is to be disturbed shall be handled by properly trained persons as required by the State Department of Labor and Industrial Relations, Occupational Safety and Health Division. Disposal of lead-based paint debris shall be conducted in accordance with the State Department of Health, Solid and Hazardous Waste Branch (SHWB) rules.
Should there be any questions regarding asbestos or lead-based paint matters, please contact Mr. Jerry Haruno, Environmental Health Program Manager, Noise, Radiation and Indoor Air Quality Branch at 586-4701.

Vector Control

The property may be harboring rodents which will be dispersed to the surrounding areas when the site is cleared. The applicant is required by Chapter 11-26, "Vector Control", Hawaii Administrative Rules to eradicate any rodents prior to clearing the site and to notify the Department of Health by submitting Form VC-12 to the local vector control office when such action is taken. Rodent traps and/or rodenticides should be set out on the project site for at least a week or until the rodent activity ceases. Attached is the "Notice to Contractors" VC-12 Form.

The Oahu vector control office phone numbers is 831-6767.

Control of Fugitive Dust

Construction activities must comply with provisions of Hawaii Administrative Rules, Chapter 11-60.1, "Air Pollution Control," Section 11-60.1-33, Fugitive Dust.

The contractor should provide adequate measures to control dust from the road areas and during the various phases of construction. These measures include, but are not limited to:

a. Planning the different phases of construction, focusing on minimizing the amount of dust generating materials and activities, centralizing on-site vehicular traffic routes, and locating potentially dusty equipment in areas of the least impact;

b. Providing an adequate water source at the site prior to start up of construction activities;

c. Landscaping and rapid covering of bare areas, including slopes, starting from the initial grading phase;

d. Controlling of dust from shoulders and access roads;

e. Providing adequate dust control measures during weekends, after hours, and prior to daily start-up of construction activities; and

f. Controlling of dust from debris being hauled away from project site.
Mr. Ralph E. Portmore, AICP
June 7, 1999
Page 3

If you have any questions regarding these issues on fugitive
dust, please contact the Clean Air Branch at 586-4200.

Sincerely,

[Signature]
Gary Gill,
Deputy Director for
Environmental Health

Enclosure

C: NRIAQB
   VCB
NOTICE TO CONTRACTORS

FROM: VECTOR CONTROL BRANCH, STATE HEALTH DEPARTMENT

SUBJECT: RODENT CONTROL REQUIREMENTS ON DEMOLITION OF STRUCTURES AND CLEARING OF SITES AND VACANT LOTS

1. Department of Health, Administrative Rule: Title 11, Chapter 26, Vector Control, Section 11-26-35, Rodents; Demolition of Structures and Clearing of Sites and Vacant Lots, stipulates that:
   (a) No person, firm, or corporation shall demolish or clear any structure, site, or vacant lot without first ascertaining the presence or absence of rodents which may endanger the public health by dispersal from such premises.
   (b) Should such inspection reveal the presence of rodents, the person, firm, or corporation shall eradicate the rodents before demolishing or clearing the structure, site, or vacant lot.
   (c) The Department may conduct an independent inspection to monitor compliance, or request a written report.

2. The purpose of this rule is to prevent rodents from dispersing into adjacent areas when buildings are demolished or vacant lots are cleared.

3. Contractors may either hire a pest control firm or do the job themselves with a qualified employee. Poison baits must be inspected daily and replenished as necessary to provide a continuous supply for at least one week before the start of any work.

4. For further information or assistance, contact the Vector Control Branch:
   Oahu: 2611 Kililau Street, Honolulu, 96819, Phone: 831-6767
   Hawaii: 191 Kuawa Street, Hilo, 96720, Phone: 933-4386
   Maui-Molokai-Lanai: 54 High Street, Wailuku, 96793, Phone: 877-2451
   Kauai: 3040 Umi Street, Lihue, 96766, Phone: 241-3306

(Tear sheet to be retained by Vector Control Branch)

The firm I represent is aware of the requirements of Administrative Rule 11-26, Section 11-26-35, Rodents; Demolition of Structures and Clearing of Sites and Vacant Lots.

| NAME OF PERSON, FIRM, OR CORPORATION (PRINT) | PHONE NO. (PRINT) |
| PROJECT SITE (ADDRESS) (PRINT) | DISTRICT (PRINT) |
| NAME OF REPRESENTATIVE (PRINT) | TITLE (PRINT) |
| SIGNATURE OF REPRESENTATIVE | DATE (PRINT) |

VC-12 Rev. 3/94
September 30, 1999

Mr. Gary Gill
Deputy Director for Environmental Health
Department of Health
State of Hawai‘i
P.O. Box 3378
Honolulu, HI 96801

Subject: Kalihi Valley Homes – Site and Dwelling Improvements
Draft Environmental Assessment

Dear Mr. Gill:

Thank you for your June 7, 1999 letter regarding your review of the Draft Environmental Assessment (Draft EA) for the above-referenced project. Our responses to your comments are provided below.

Asbestos Concerns

We appreciate the information provided concerning inspection and handling requirements related to the possible presence of asbestos in buildings to be renovated or demolished. This project will ultimately involve the demolition of 11 apartment buildings on the project site, the renovation of 34 apartment buildings, and the replacement of the existing administration and community center building with a single facility accommodating both activities. Asbestos surveys of all these structures have been completed. However, a contract for this project has not yet been awarded, so we are not in a position to refer these requirements directly to the selected contractor at this time. The inspection reports and copies of your letter and this letter have been referred to the project architects for incorporation in the project specifications.

Lead-Based Paint Concerns

We appreciate the information provided on requirements and contact phone numbers related to the handling of lead-based paint and disposal of related debris. Copies of your letter and this letter have been referred to the project architects for the inclusion of this information in the project specifications.

Vector Control

We appreciate the information provided on requirements and contact phone numbers related to vector control. Copies of your letter and this letter have been referred to the project architects for the inclusion of this information in the project specifications.
Letter to Mr. Gary Gill
Deputy Director for Environmental Health
Department of Health, State of Hawai‘i
September 30, 1999
Page 2

Control of Fugitive Dust

We appreciate the information provided on requirements and contact phone numbers related to the control of fugitive dust. Copies of your letter and this letter have been referred to the project architects for the inclusion of this information in the project specifications.

Conclusion

Your letter and this response letter will be included in the Final EA. Copies of the Final EA and FONSI will be provided to your office upon their completion and issuance. We appreciate your input on this project.

Sincerely,

GROUP 70 INTERNATIONAL, INC.

Ralph Portmore, AICP
Principal

cc: Mr. Roy Nishi, AIA
Group 70 International, Inc.
May 24, 1999

Donald K.W. Lau
Housing and Community Development Corporation of Hawaii
677 Queen Street, #300
Honolulu, HI 96813

Attn: Stanley Fujimoto

Dear Mr. Lau:

Subject: Draft environmental assessment (EA) for Kalihi Valley Homes

We have the following comments to offer:

1. Two-sided pages: In order to reduce bulk and conserve paper, we recommend printing on both sides of the pages in the final document.

2. Contacts: In the final EA document all contacts made during the preconsultation phase of this environmental review, including a synopsis of the meetings with the residents. Include copies of any correspondence.

3. Sustainable Building Design: Please consider applying sustainable building techniques presented in the enclosed "Guidelines for Sustainable Building Design in Hawaii." In the final EA include a description of any of the techniques you will implement.

If you have any questions call Nancy Heinrich at 586-4185.

Sincerely,

GENEVIEVE SALMONSON
Director

c: Ralph Portmore, Group 70
Guidelines for Sustainable Building Design in Hawaii
A planner's checklist  ©EQC September 1994

Introduction:
What is a "sustainable" building?
A sustainable building is built to minimize energy use, expense, waste, and impact on the environment. It seeks to improve the region's sustainability by meeting the needs of today's market without compromising the needs of future generations. Compared to conventional projects, a resource-efficient building project will:

I. Use less energy for operation and maintenance

II. Contain less embodied energy (e.g. locally produced building products contain less embodied energy than imported products because they require less energy-consuming transportation to the site)

III. Protect the environment by preserving/conserving water and other natural resources and by minimizing impact on the site ecosystem

IV. Minimize health risks to those who construct, maintain, and occupy the building

V. Minimize construction waste

VI. Recycle and reuses generated construction wastes

VII. Use resource-efficient building materials

VIII. Provide the highest quality product practical at competitive (affordable) prices

Hawaii law calls for efforts to conserve natural resources, promote careful use of water, efficient use of energy and recycle all waste products. To meet this goal, special care must be taken to plan a project from the very beginning to be in keeping with sustainable building design concepts.

The purpose of the state's environmental review law (HRS Ch. 343) is to encourage full, accurate and complete analysis of proposed actions, promote public participation and support enlightened decision making by public officials. To assist agencies and applicants in meeting this legal purpose, the Office of Environmental Quality Control offers the following guidelines for preparers of environmental reviews under the authority of HRS 343.

These guidelines do not constitute rules or law. They have been refined by staff and peer review
to provide a helpful checklist of items that will assist planners to design projects that will have a minimal effect on Hawaii's environment and make wise use of our natural resources. In a word, projects that are sustainable.

In order to avoid excessive overlapping of items, the checklist is designed to be read in totality, not just as individual sections. This checklist tries to address large scale projects as well as smaller projects. Please use items that are appropriate to the scale of the project.

Although this list will help promote careful and sensitive planning, mere compliance with this checklist does not confirm sustainability. Compliance and knowledge of current building codes by users of this checklist is also required.

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I. Team Building

Hold programming team meeting with client representative, Project Manager, planning consultant, architectural consultant, civil engineer, mechanical, electrical, plumbing (MEP) engineer, structural engineer, landscape architect, interior designer, sustainability consultant and other consultants as required by the project. Identify project and environmental goals. Client representatives and consultants to work closely to ensure that environmental and project goals are met.

Develop sustainable guideline goals to insert into outline specifications as part of the Schematic Design documents. Extract applicable goals from the following sections as appropriate to project.

Use Benefit Cost Method for economic analysis of the sustainability measures chosen. (Benefit Cost Method is a method of evaluating projects or investments by comparing the present value or annual value of expected benefits to the present value or annual value of expected cost.)

Include "Commissioning" in the project budget and schedule. (Commissioning is the process of verifying that equipment and systems are installed and are able to operate according to the design and operational needs. It improves the performance of building, resulting in energy conservation and efficiency, improves air quality and lowers operation costs. Refer to Section IX.)

II. Building Design

Consider renovating an existing building instead of demolishing and/or constructing a new building.

Plan for high flexibility while designing building shell and interior spaces to accommodate changing needs of the occupants, and hence possibly extend life span of building.

Design for re-use and/or disassembly. For building products, see Section VII.

Provide facilities for bike/walking commuters (showers, lockers, bike racks).

Plan for comfortable and healthy work environment. Include inviting outdoor spaces, wherever possible. (Refer to Sections VII and VIII.)

Design space for recycling/waste diversion opportunities during occupancy.

Design with an integrated pest management approach. Investigate using products such as Termi-mesh, Basaltic Termite Barrier and Sentricon to limit pest access into structure.

Design building that is energy efficient and resource efficient. (See Sections III, IV, V, VI, VII.) Determine building by-products such as heat, gray-water etc., and plan to minimize them or find alternate uses for them.

For natural cooling, use
1. Reflective roof, radiant barrier or insulation, roof vents
2. Light colored paving (concrete) and building surfaces
3. Tree Planting to shade buildings and paved areas
4. Building orientation and design to capture trade winds.
III. Site Selection & Site Design

Site Selection

- Understand the site through careful analysis and assessment of site characteristics such as vegetation, topography, geology, climate, natural access to site, solar orientation patterns, water and drainage, existing utility and transportation infrastructure to determine the appropriate use of site, and design to minimize the environmental impact of the development.
- Select site in a neighborhood, when feasible, on which the project could have a positive social, economic and environmental impact.
- Select a site with short connections to existing municipal infrastructure (water, waste water treatment plant, roads, electricity, telephone, data and gas). Select a site close to mass transportation, bicycle routes and pedestrian access.

Site Preparation and Design

- Preserve existing resources and natural features to enhance the design and add aesthetic, economic and practical value. Design to minimize the environmental impact on vegetation and topography.
- Site building(s) to take advantage of natural features and maximize their function such as solar access, day-lighting and natural cooling. Design ways to integrate the building(s) with the site that maximizes site efficiencies, enhances human comfort, safety and health, as well as, achieves operational efficiencies.
- Locate the building(s) to encourage bike and pedestrian access and pedestrian oriented uses.
- Retain existing topsoil and maintain soil health by clearing only the areas carefully marked for construction of streets, driveways, parking areas, and building foundations. Replant exposed areas when practical. Reuse soils and vegetation excavated for fill or mulch.
- Grade slopes to ratio less than 2 : 1 (run to rise). Balance cut and fill to eliminate hauling. Check grading frequently to prevent accidental over excavation.
- Minimize altering natural water drainage. Provide siltation basins to protect the site during and after construction, especially, in the event of a major storm.
- Minimize area required for the building footprint. Consolidate utility and infrastructure into common corridors to reduce unnecessary site degradation, and minimize cost, improve efficiency, centralize runoff, and reduce impermeable surfaces.
- For ground treatment, avoid the use of pesticides or other toxic chemicals. Use alternative methods such as Termi-mesh, Basaltic Termite barrier, and Sentricon, etc.

IV. Energy Use

- Facilitate site sensitive orientation by:
  1. Minimizing impact on cooling load through site shading and east-west orientation.
2. Incorporating natural ventilation through channeling trade winds.
3. Using daylighting where possible.
   Maximize efficiencies for Lighting, Heating, Ventilation, Air Conditioning (HVAC) and other equipment.
   Design south, east and west shading devices to minimize solar heat gain.
   Utilize low shading co-efficient window system to minimize solar heat gain. Minimize effects of thermal bridging in walls, roof and window systems.
   Eliminate hot water in restrooms when possible.
   Pressurize building to reduce mold and mildew.
   Obtain a copy of State of Hawaii Model Energy Code (available through the Hawaii State Energy Division, at Tel. (808)-587-3811). Exceed its requirements.
   Use renewable energy. Consider the use of solar water heaters and photovoltaics. (Contact State Energy Office at Tel. (808)-587-3810 for information on the utility-sponsored Commercial and Industrial Energy Efficiency Programs which offer incentives to businesses for installing qualifying energy efficient technologies.)
   Use available energy resources such as waste heat.
   Consider design for tenant sub-metering to encourage utility use accountability.

**Energy Lighting**
- Design for at least 15% lower interior lighting power allowance than the Energy code.
- Select lamps with high efficiency, compatible with the desired light source and color rendering capabilities.
- Select luminaires which maximize system efficacy (i.e. which deliver the light to the task, not the surrounding areas).
- Reduce light absorption on surfaces by selecting colors and finishes with high reflectance values, but avoid glare.
- Use task lighting with low ambient light levels.
- Use luminaires with heat removal and recovery capabilities.
- Maximize integration of daylighting through the use of vertical fenestration, light shelves, clerestories/monitors, and building form as well as through translucent/transparent/modular interior partitions. Coordinate electrical lighting with day lighting for maximum electrical efficiency.
- Incorporate day lighting control, or photo/motion sensors in low or intermittent use areas.
- Avoid light spillage in exterior lighting by using directional fixtures.
- Minimize light overlap in exterior lighting schemes.
- Use lumen maintenance controls.

**Mechanical Systems**
- Design to comply with the Energy code and to exceed it's energy conserving requirements.
- Utilize thermal storage for reduction of peak energy usage.
- Use Variable air volume systems to save fan power.
- Use variable speed drives on pumping systems and fans for cooling towers and air handlers.
Use air-cooled refrigeration equipment or use cooling towers designed to reduce drift.
Reduce need for mechanical ventilation by reducing sources of indoor air pollution. Use high efficiency air filters. Use ASHRAE standards as minimum.
Locate fresh air intake away from polluted or overheated areas. Locate on roof where possible. Separate air intake from air exhausts by at least 40 ft.
Use separate HVAC systems to serve areas that operate on widely differing schedules or design conditions.
Use shut off or set back controls on HVAC system when areas are not occupied.
Evaluate the potential use of condenser heat, waste heat or solar energy to reduce water heating energy cost. (Contact State Energy Office at Tel. (808)-387-3810 for information on the utility-sponsored Commercial and Industrial Energy Efficiency Programs which offer incentives to businesses for installing qualifying energy efficient technologies.)
Evaluate plug-in loads for energy efficiency and power saving features.
Improve comfort and save energy by reducing the relative humidity by waste reheat, heat pipes or solar heat.
Minimize heat gain from equipment and appliances by using:
2. Hoods to remove heat from concentrated sources.
4. Specify HVAC system "commissioning" period to reduce occupant exposure to Indoor Air Quality (IAQ) contaminants.
5. Specify premium efficiency motors.

V. Water Use

Building Water
Install water efficient fixtures as required by the Uniform Plumbing Code.
If practical, eliminate hot water in restrooms.
Use infrared sensors for flushing of toilets and urinals.
Use self closing faucets (infrared sensors or spring loaded faucets) for lavatories and sinks.

Landscaping and Irrigation
(See Section VI)

VI. Landscape and Irrigation
Incorporate water efficient landscaping (xeriscaping) using the following principles:
1. Planning. Efficient irrigation: Create watering zones for different conditions. Separate vegetation types by different watering requirements. Install moisture sensors to avoid operation of the irrigation system in the rain and if the soil has adequate moisture. Use
different types of (appropriate) sprinkler heads.

2. **Soil analysis/improvement**: Use (locally made) soil amendments and compost for plant nourishment, better absorption and water holding capacity.

3. **Appropriate plant selection**: Use drought tolerant and/or slow growing hardy grasses, native plants, shrubs, ground covers, trees, appropriate for local conditions, hence minimizing the need for irrigation. Maintain existing vegetation to encourage bio-diversity and protect nutrients.

4. **Practical turf areas**: Turf only in areas where it provides functional benefits.

5. **Mulches**: Use mulches to minimizes evaporation, reduce weed growth, retard erosion.

   - Protect existing natural site features and save native trees to prevent erosion. Establish tree protection areas well before construction.
   - Limit staging area and prevent unnecessary grading of site to protect native vegetation.
   - Use native top soil from the structure's footprint, stockpiled on the site with a silt fence in order to reduce the need for imported top soil.
   - Irrigate with non-potable water or reclaimed water. Harvest rainwater from the roof for irrigation.
   - Sub-meter the irrigation system. Locate irrigation controller within visual site of the irrigated area to verify that the system is operating properly.
   - Use pervious paving instead of concrete or asphalt paving. Integrate natural and man-made berms, hills and swales to control water runoff.
   - Avoid materials that leach out pollutants which can contaminate the water runoff. Contact the Clean Water Branch at 586-4309 to determine whether a NPDES (National Pollutant Discharge Elimination System) permit is required.
   - Use trees and bushes that are felled at the building site (i.e. mulch, fence posts, trim).
   - Use recycled landscape materials such as plastic lumber for planters and benches.

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**VII. Building Materials & Solid Waste Management**

**Design for Material**

- Use durable products. Opt for natural products or products with low embodied energy.
- Specify and use products with recycled content such as steel, concrete with fly ash or glass, drywall, carpet etc. Use ground recycled concrete, graded glass cullet or asphalt as base or fill material.
- Specify low toxic or non-toxic materials whenever possible, such as low VOC. (Volatile Organic Compounds) paints, sealers and adhesives, low or formaldehyde-free materials. Also avoid products with CFCs (Chloro-fluoro-carbons).
- Use locally produced products such as plastic lumber, insulation, hydromulch, glass tiles, compost.
- Use advanced framing systems, two stud corners, engineered structural products and panel systems.
- Use materials which require limited or no application of finishing or surface preparation. (i.e. finished concrete floor surface).
Use re-milled salvaged lumber where appropriate and as available. Minimize the use of old growth timber.

Use sustainably harvested timber.

Commit to a material selection matrix for efficient and environmentally sensitive use of raw materials and building materials, and locally available building materials. (A list of Earth friendly products and materials is available through the Green House Hawaii Project. Call Clean Hawaii Center, Tel. (808)-587-5802 for the list.)

Develop a Solid Waste Management, Recycling and Diversion Plan

Prepare and post a job-site recycling plan at the site office.

Conduct pre-construction waste minimization training for employees and sub-contractors.

Use a central area for all cutting.

Establish a dedicated waste separation/diversion area. Include Waste/Compost/Recycling collection area and collection system for both construction process and building operation.

Separate and divert all unused or waste cardboard, ferrous scrap, construction materials, fixtures for recycling or to a salvage exchange facility. Information on "Minimizing C&D (construction and demolition) waste in Hawaii" is available through Department of Health, Office of Solid Waste Management, Tel. (808)-586-4240.

Use on site or divert all green waste, untreated wood and clean drywall for soil amendments.

Use on-site or divert all concrete and asphalt rubble.

Manage waste from the use of solvents, paints, sealants, etc. separate from C&D (construction and demolition) waste. Donate paint to non-profit organizations or list on HIMEX (Hawaii Materials Exchange). HIMEX is a free service operated by Maui Recycling Group, that offers an alternative to landfill disposal of usable materials, and facilitates no-cost trades. See web site, www.himex.org.

Use suppliers that re-use or recycle packaging material whenever possible.

VIII. Indoor Air Quality

Provide IAQ requirements during design and contract document phases. Requirements are to be followed during construction in order to minimize or contain IAQ contaminant sources during construction, renovation and remodeling, especially if there are occupants in the building.

Notify the occupants of any type of construction, renovation and remodeling.

Allow a flush-out period after construction, renovation and remodeling to minimize exposure to any chemicals and debris.

Use low-emitting materials, products, and solvents. Reduce sources of interior formaldehyde. Select furnishing and cabinetry with no VOC (Volatile Organic Compounds) off-gassing.

Research the original usage and design of the building before it is reoccupied to ensure that adequate amounts of fresh air is available and distributed to the occupants.
Asbestos and lead paint are not allowed in new buildings. Inspect for the same in existing buildings and abate as needed.

Stage finish application to prevent absorption of Volatile Organic Compounds (VOC's) into surrounding materials.

Supply workers with, and ensure use of, VOC-safe masks.

Install separate exhaust fans in rooms where office equipment is used, and exhaust to the exterior of the building.

Place bird guards over air intakes to prevent pollution of shafts.

Use low or non-toxic cleaners.

IX. Commissioning & Construction Project Closeout

Project Manager to coordinate Commissioning activities during project closeout. Criteria to be established by Architect/Engineer Consultant.

Provide as-built drawings and documentation for all systems and their control strategies as well as maintenance and cleaning manuals for finish materials.

Involved parties should successfully demonstrate all systems before final acceptance.

Provide flush-out period to remove airborne contaminants from the building and systems.

X. Occupancy and Operation

General Objectives

Develop User's Manual for building occupants that illustrates the commitment to sustainable operations.

Administrator’s responsibilities must include ensuring that the department’s sustainability policies are being carried out.

Energy

Purchase EPA rated, Energy Star, energy-efficient office equipment, appliances, computers, and copiers. (Energy Star is a program sponsored by U.S. Dep. of Energy, implies that product will contribute to reduced energy costs for buildings and reduce air pollution.)

Institute an employee education program about efficient use of building, appliances, occupants impact on water use, energy use, etc.

Re-commission systems whenever modifications are made to the systems.

Water

Start the watering cycle in early morning in order to minimize evaporation.

To reduce cooling tower water consumption, increase cycles of concentration utilizing chemical treatment.
Air
- Provide incentives which encourage building occupants to use alternatives to single occupancy vehicles.
- Provide location map of services within walking distance (child care, restaurants, gyms, shopping).
- Periodically monitor or check for indoor pollutants in building.
- Provide an IAQ plan for tenants and management to establish a policy/documentation response procedure. This helps tenants understand their responsibility to protect the air quality of the facility.

Materials and Products
- Purchase business products with recycled content such as paper, toners, ribbons.
- Purchase Furniture made with natural, sustainably harvested wood, or with recycled materials, which will not off gas VOC’s.
- Remodeling and painting should comply or improve on original sustainable design intent.
- Use low VOC, non-toxic, phosphate and chlorine free, biodegradable cleaning products.

Solid Waste
- Collect recyclable business waste such as paper, soda cans, and cardboard boxes.
- Avoid single use items such as paper or Styrofoam cups and plates, and plastic utensils.

XI. Resources

**Buy Recycled in Hawaii.** Clean Hawaii Center, Energy, Resources and Technology Division, Department of Business, Economic Development and Tourism, November 1997. (Call 587-3802 for publication)

**Guide to Resource-Efficient Building in Hawaii.** University of Hawaii at Manoa, School of Architecture and Energy, Resources and Technology Division, Department of Business, Economic Development and Tourism, October 1998. (Call 587-3804 for publication)

**Minimizing Construction and Demolition Waste.** Office of Solid Waste Management, Department of Health and Clean Hawaii Center, Energy, Resources and Technology Division, Department of Business, Economic Development and Tourism, February 1998. (Call 586-4240 for publication)

**Hawaii Model Energy Code.** Energy, Resources and Technology Division, Department of Business, Economic Development and Tourism, November 1997. (Call 587-3810 for publication)
September 30, 1999

Ms. Genevieve Salmonson, Director
Office of Environmental Quality Control
State of Hawai‘i
235 S. Beretania St., Suite 702
Honolulu, HI 96813

Subject: Kalihi Valley Homes - Site and Dwelling Improvements
Draft Environmental Assessment

Dear Ms. Salmonson:

Thank you for your May 24, 1999 letter to Mr. Donald K. W. Lau of the Housing and Community Development Corporation of Hawai‘i regarding your review of the Draft Environmental Assessment (Draft EA) for the above-referenced project. Our responses to your comments are provided below.

Two-sided Pages: The final document will be printed on both sides of the page. In addition, all comment and response letters, and the two appendices, will be reduced so it can be printed at two pages per side.

Contacts: Formal notes were prepared for three meetings with residents - a design charrette and follow-up meeting with the KVH Resident Association Board of Directors in September 1998, and a March 1999 community presentation of the proposed project design that is described in the Draft EA. Copies are provided in Appendix A. In addition, Appendix B provides a copy of a community survey, the results of which were used in developing the project design.

Sustainable Building Design: A copy of your enclosed “Guidelines for Sustainable Building Design in Hawaii” has been forwarded to the project architects for their consideration. A preliminary indication of those techniques that are to be used will be included in the Final EA.

Conclusion: Your letter and this response letter will be included in the Final EA. Copies of the Final EA and FONSI will be provided to your office upon their completion and issuance. We appreciate your input on this project.

Sincerely,

GROUP 70 INTERNATIONAL, INC.

[Signature]

Ralph Portmore, AICP
Principal

cc: Mr. Roy Nihei, AIA
Group 70 International, Inc.
LD-NAV
PSF\99-144

Mr. Ralph E. Portmore, AICP
Group 70 International, Inc.
925 Bethel, Fifth Floor
Honolulu, Hawaii  96813

Dear Mr. Portmore:

SUBJECT: Review : Draft Environmental Assessment
Applicant: State of Hawaii, Housing and Community
Development Corporation
Project : Kalihi Homes - Site Development Improvements
Location : Honolulu, Island of Oahu, Hawaii
TMK : 1st/ 1-3-22: 01

Thank you for the opportunity to review the subject Draft
Environmental Assessment for the proposed project.

Our Land Division, Engineering Branch has confirmed that the
project site is located in Zone X. This is an area determined to be
outside the 500-year flood plain.

The Department of Land and Natural Resources has no other
comment to offer on the subject matter.

Should you have any questions, please feel free to contact
Nicholas Vaccaro of our Land Division, Support Services Branch at
587-0438.

Very truly yours,

[Signature]
DEAN Y. UCHIDA
Administrator

c: Oahu District Land Office
September 30, 1999

Mr. Dean Uchida, Administrator
Land Division
Department of Land and Natural Resources
State of Hawai‘i
P.O. Box 621
Honolulu, HI 96809

Subject: Kaliihi Valley Homes – Site and Dwelling Improvements
Draft Environmental Assessment
[Your Ref. No. DEA132201.RCM]

Dear Mr. Uchida:

Thank you for your June 7, 1999 letter regarding your review of the Draft Environmental Assessment (Draft EA) for the above-referenced project. Our responses to your comments are provided below.

Flood Hazard District Designation: Thank you for verifying that the project site is in an area determined to be outside the 500-year floodplain.

Conclusion: Your letter and this response letter will be included in the Final EA. We appreciate your input on this project.

Sincerely,

Ralph Portmore, AICP
Principal

GROUP 70 INTERNATIONAL, INC.
MEMORANDUM

TO:    Nancy Heinrich, State of Hawaii, Office of Environmental Quality Control

FROM:  Earl Pawn Jr. DLNR/Division of Forestry and Wildlife, Oahu Branch

SUBJECT: Comments on Kaihi Valley Homes Improvements

A field visit was made to make an assessment for the comments needed on behalf of DLNR/DOFAW.

Although there are no Rare and Endangered Plants that exist in the project area, we should take into consideration any vegetation (Tree or Brush) >10 ft. to be removed and maintained at low levels. A recommendation to delineate a fire/fuelbreak around the project area within Housing property boundaries will address and buffer potential threats, i.e., brush fire, landslides, etc.... Other reasons to consider are; Hazard trees that may have the potential to fall and damage homes/structures. Fuel loading adjacent to project area would intensify fire starts and raise BTU’s to higher levels of radiation.

Fire will have the potential to destroy wildlife habitat, including the wallaby colony that exist on the slopes nearby. Adjacent forested areas on private/public lands will be severely affected and an additional threat to other residential areas nearby.

It is my hope that these comments are factored into the project plans. Should there be more questions please contact me at your earliest convenience, 973-9785.

Mahalo!
September 30, 1999

Mr. Earl Pau, Jr.
Division of Forestry and Wildlife, Oahu Branch
Department of Land and Natural Resources
State of Hawaii
P.O. Box 621
Honolulu, HI 96809

Subject: Kalihi Valley Homes – Site and Dwelling Improvements
Draft Environmental Assessment

Dear Mr. Pau,

Thank you for your May 28, 1999 Memorandum to Ms. Nancy Heinrich of the State Office of Environmental Quality Control regarding your review of the Draft Environmental Assessment (Draft EA) for the above-referenced project. Our responses to your comments are provided below.

Presence of Rare or Endangered Plants: Thank you for making a field visit to the project site and verifying that there are no rare or endangered plants there.

Removal of Vegetation: As described in the Draft EA, this project involves only the demolition and renovation of existing structures. Additional trees will be included in the landscaping that will be provided in the areas where the TI building are to be demolished. The only new construction that may affect existing larger bushes or trees is where grassed play fields and a new play court are planned in the vicinity of the community center. Most of this new open area is currently occupied by four buildings that are slated for demolition. While a few larger bushes or trees may need to be removed, there will be a significant overall increase in the landscaping in this area.

Fire/Fuelbreak Around the Project Area: Landscaping within the project site will continue to be maintained in a manner that avoids the creation of a fire hazard. HCDCCH has no control over adjoining properties and is not in a position to establish or maintain a fire break on these lands. This project does not include any proposals that would increase the fire hazard for project residents.

Conclusion: Your letter and this response letter will be included in the Final EA. We appreciate your input on this project.

Sincerely,

GROUP 70 INTERNATIONAL, INC.

Ralph Portmore, AICP
Principal
May 20, 1999

Stanley T. Fujimoto
State of Hawaii
Housing and Community Development Corporation
677 Queen Street, Suite 300
Honolulu, Hawaii 96813

Dear Mr. Fujimoto:

SUBJECT: Chapter 6E-8 Historic Preservation Review -- Draft Environmental Assessment (DEA) for the Kalihi Valley Homes - Site Dwelling Improvements
Kalihi, Kona, O'ahu
TMK: 1-3-022-001

Thank you for the opportunity to review the DEA for this project. The State of Hawaii Housing and Community Development Corporation of Hawaii (HCDCH) proposes a phased renovation program for existing building exteriors and interiors, site improvements, and selective demolition of 11 existing buildings at the Kalihi Valley Homes site. The existing housing project was designed and constructed between 1952 and 1954.

A review of our records shows that there are no known historic sites at the project location. Since the project proposes little disturbance to existing soils, demolition of structures less than 50 years old, and because it is unlikely that historic sites exist in the project area given past land alteration and site improvements, we believe that this project will have "no effect" on historic sites.

If you have any questions please call Elaine Jourdane at 692-8027.

Aloha,

Don Hibbard, Administrator
State Historic Preservation Division

EJjk

c: Ralph E. Portmore, AICP, Group 70 International Inc. 925 Bethel Street, 5th Floor, Honolulu, Hawaii 96813-4307
September 30, 1999

Mr. Don Hibbard, Administrator
Historic Preservation Division
Department of Land and Natural Resources
State of Hawai‘i
Kakahihea Building, Suite 555
601 Kamokila Boulevard
Kapolei, HI 96707

Subject: Kalihi Valley Homes – Site and Dwelling Improvements
Draft Environmental Assessment

Dear Mr. Hibbard:

Thank you for your May 20, 1999 letter to Mr. Stanley T. Fujimoto of the Housing and Community Development Corporation of Hawai‘i regarding your review of the Draft Environmental Assessment (Draft EA) for the above-referenced project. Our responses to your comments are provided below.

No Known Historic Sites: Thank you for reviewing your records and verifying that there are no known historic sites at the location of this project.

Finding of No Effect: We appreciate your finding that, given the existing site conditions and the scope of the proposed improvements, the project should have “no effect” on historic sites.

Conclusion: Your letter and this response letter will be included in the Final EA. Copies of the Final EA and FONSI will be provided to your office upon their completion and issuance. We appreciate your input on this project.

Sincerely,

GROUP 70 INTERNATIONAL, INC.

Ralph Portnoy, AICP
Principal
June 2, 1999

Mr. Ralph E. Portmore
Group 70 International
925 Bethel Street, Fifth Floor
Honolulu, Hawaii 96813-4307

Dear Mr. Portmore:

Subject:  Your Letter Dated April 28, 1999 Regarding the Draft Environmental Assessment for the Proposed Kalihl Valley Homes-Site and Dwelling Improvements, Honolulu, Hawaii, TMIK: 1-3-22: 01

Thank you for the opportunity to review and comment on the Kalihl Valley Homes project.

We provide the following comments:

1. The developer will be required to obtain a water allocation from the State of Hawaii.

2. There are two existing 6-inch water meters serving the project site.

3. The availability of water will be confirmed when the building permit application is submitted for our review and approval. When water is made available, the applicant will be required to pay our Water System Facilities Charges for resource development, transmission and daily storage.

4. If a three-inch or larger meter is required, the construction drawings showing the installation of the meter should be submitted for our review and approval.

5. The proposed project will be subject to Board of Water Supply cross-connection requirements prior to the issuance of the building permit application.

If you have any questions, please contact Barry Usagawa at 527-5235.

Very truly yours,

CLIFFORD S. JAMILE
Manager and Chief Engineer
September 30, 1999

Mr. Clifford S. Jamile
Manager and Chief Engineer
Board of Water Supply
City and County of Honolulu
630 South Beretania Street
Honolulu, HI 96813

Subject: Kalihi Valley Homes – Site and Dwelling Improvements
Draft Environmental Assessment
[Your Ref. No. DEA132201.RCM]

Dear Mr. Jamile:

Thank you for your June 2, 1999 letter regarding your review of the Draft Environmental Assessment (Draft EA) for the above-referenced project. Our responses to your comments are provided below.

Water Allocation and Availability of Water: Please note that this project includes the demolition of 11 apartment buildings, and thus will involve a reduction from 400 to 301 in the total number of existing housing units in the Kalihi Valley Homes project. Consequently, water requirements will be reduced once the project is completed.

Meter and Cross-connection Requirements: All BWS requirements with respect to the design of any needed modifications to the project’s existing water system will be met.

Conclusion: Your letter and this response letter will be included in the Final EA. We appreciate your input on this project.

Sincerely,

GROUP 70 INTERNATIONAL, INC.

Ralph Fortmore, AICP
Principal
Mr. Stanley T. Fujimoto
State of Hawaii
Housing and Community Development Corporation
677 Queen Street, Suite 300
Honolulu, Hawaii 96813

Dear Mr. Fujimoto:

Subject: Kalihi Valley Homes-Site and Dwelling Improvements
Draft Environmental Assessment
Honolulu, Island of Oahu, Hawaii
TMK: 1-3-22: 01
HFD Internal No. OL 99-085

We received the Draft Environmental Assessment dated April 28, 1999, regarding the subject project. The following are our comments pertaining to this project:

1. The on-site fire hydrant system shall provide a water flow of 1,500 gpm at a residual pressure of 20 psi, and the hydrants shall be spaced 250 feet apart. The hydrant design and installation shall conform with NFPA 24.

2. Roadways should be designed to provide fire apparatus accessibility to all structures planned for this project.

Should you have any questions, please call Battalion Chief Charles Wassman of our Fire Prevention Bureau at 831-7778.

Sincerely,

[Signature]
JOHN CLARK
Acting Fire Chief

JC/CW:hh

cc: Ralph E. Portmore, AICP, Group 70 International, Inc.
September 30, 1999

Mr. John Clark
Acting Fire Chief
Fire Department
City and County of Honolulu
3375 Kapiolani Street, Suite H425
Honolulu, HI 96819-1869

Subject: Kalihi Valley Homes – Site and Dwelling Improvements
Draft Environmental Assessment

Dear Mr. Clark:

Thank you for your May 4, 1999 letter to Mr. Stanley T. Fujimoto of the Housing and Community Development Corporation of Hawai‘i regarding your review of the Draft Environmental Assessment (Draft EA) for the above-referenced project. Our responses to your comments are provided below.

On-Site Fire Hydrant System: Please note that this project includes the demolition of 11 apartment buildings, and thus will involve a reduction from 400 to 301 in the total number of existing housing units in the Kalihi Valley Homes project. The remaining 34 apartment buildings will be renovated. No new construction is proposed. Consequently, water requirements will be reduced once the project is completed. Should there be a need to replace any of the existing fire hydrants, the new hydrants will meet Fire Department design requirements.

Roadway Design: No changes to the existing roadways within the project site are planned.

Conclusion: Your letter and this response letter will be included in the Final EA. We appreciate your input on this project.

Sincerely,

Ralph Portmore, AICP
Principal
June 7, 1999

Mr. Ralph E. Portmore, AICP
Group 70 International, Inc.
925 Bethel Street, 5th floor
Honolulu, Hawaii 96813-4907

Dear Mr. Portmore:

Subject: Kalihi Valley Homes - Site and Dwelling Improvements
Draft Environmental Assessment, Honolulu, Island of Oahu, Hawaii
TMK: 1-3-22: 01

Thank you for the opportunity to review and respond to the subject document. We have the following comments.

Since the design of the project will provide for new open spaces and recreation areas as well as landscaping, the principles of Crime Prevention through Environmental Design should be applied to minimize the potential for criminal activity.

During the construction phase of this project, for any work which will occur near the driveways or the roadways surrounding Kalihi Valley Homes, safety controls for both vehicle and pedestrian will need to be addressed. Construction activity should be scheduled to cause the least impact on traffic and the surrounding community.

As with other housing projects, we believe that the proposed renovations and improvements at this site will help to instill pride for the residents and thus result in helping to minimize calls for police service.

If there are any questions, please feel free to call me at 529-3255 or Lieutenant Russell Miyada of District 5 at 842-7737.

Sincerely,

[Signature]

EUGENE-UEMURA
Assistant Chief of Police
Support Services Bureau

cc: Mr. Stanley T. Fujimoto
State of Hawaii
Housing and Community Development Corporation
677 Queen Street, Suite 300
Honolulu, Hawaii 96813
September 30, 1999

Mr. Eugene Uemura
Assistant Chief of Police
Support Services Bureau
Police Department
City and County of Honolulu
801 South Beretania Street
Honolulu, HI 96813

Subject: Kalihi Valley Homes – Site and Dwelling Improvements
Draft Environmental Assessment

Dear Assistant Chief Uemura:

Thank you for your June 7, 1999 letter regarding your review of the Draft Environmental Assessment (Draft EA) for the above-referenced project. Our responses to your comments are provided below.

Design of New Open Spaces, Recreation Areas and Landscaping: We appreciate the importance of designing new open areas in a manner that will minimize the potential for criminal activity. Your comments have been referred to the project architects for their consideration. Every effort will be made to apply the “principles of crime prevention through environmental design” in the planning of these areas.

Construction Activities near Driveways or Roadways: Appropriate safety controls for both vehicles and pedestrians will be instituted in construction zones. Where necessary, construction will also be scheduled during off-peak travel hours in order to avoid any undue impacts on traffic in the surrounding community and along Likelike Highway.

Conclusion: Your letter and this response letter will be included in the Final EA. We appreciate your input on this project.

Sincerely,

GROUP 70 INTERNATIONAL, INC.

Ralph Portmore, AICP
Principal

cc: Mr. Roy Nihei, AIA
Group 70 International, Inc.
Mr. Donald Lau, Executive Director  
Housing and Community Development Corporation  
State of Hawaii  
677 Queen Street, Suite 300  
Honolulu, Hawaii 96813

Attn: Stanley T. Fujimoto

Dear Mr. Lau:

Draft Environmental Assessment (EA)  
Kalihi Valley Homes Site & Dwelling Improvements  
2250 Kelena Drive, Honolulu, Oahu  
Tax Map Key: 1-3-22: 1

We have reviewed the Draft EA for the above-referenced project received on April 29, 1999, and find the information to be generally accurate. We believe that this renovation project, with its reduction in the overall density, improved aesthetics, and upgraded amenities, is consistent with the City's General Plan and Development Plan for Oahu's Primary Urban Center.

We would however, like to point out that a drainage report may be required with the construction plans when they are submitted for approval. Also, a Drain Connection Permit Application must be filed with the Department of Planning and Permitting, Civil Engineering Branch if the State does not have a storm drain connection license from the City for the secondary interceptor ditches which discharge directly into the City-owned separate storm sewer system.
Mr. Donald Lau, Executive Director
Page 2
June 7, 1999

Should you have any questions, please contact Steve Tagawa of our Coastal Lands Branch at 523-4817.

Very truly yours,

JAN NAOE SULLIVAN
Director of Planning and Permitting

JNS:am

cc: Group 70 International, Inc.
Office of Environmental Quality Control

FOSSE Doc. No.: 4968
September 30, 1999

Ms. Jan Naoe Sullivan, Director  
Department of Planning and Permitting  
City and County of Honolulu  
650 South King Street, 6th Floor  
Honolulu, HI 96813

Subject: Kalihi Valley Homes – Site and Dwelling Improvements  
Draft Environmental Assessment

Dear Ms. Sullivan:

Thank you for your May 4, 1999 letter to Mr. Donald Lau of the Housing and Community Development Corporation of Hawai‘i regarding your review of the Draft Environmental Assessment (Draft EA) for the above-referenced project. Our responses to your comments are provided below.

Consistency with the City’s General Plan and Primary Urban Center Development Plan: We agree with and appreciate your finding that the proposed improvements and upgrades are consistent with the City’s housing-related planning objectives, policies, principals and guidelines.

Need for a Drainage Report or Drainage Connection Permit: Please note that this project includes the demolition of 11 apartment buildings, and thus will involve a reduction from 400 to 301 in the total number of existing housing units in the Kalihi Valley Homes project. The remaining 34 apartment buildings will be renovated. No new construction or alterations to the existing terrain or project site layout are proposed. Rather, additional landscaped open space will be created.

Consequently, storm water runoff and drainage requirements should be reduced once the project is completed. No changes to the site’s existing drainage system that would generate the need for the preparation of a drainage report or filing of a drainage connection permit are anticipated.

Conclusion: Your letter and this response letter will be included in the Final EA. We appreciate your input on this project.

Sincerely,

GROUP 70 INTERNATIONAL, INC.

Ralph Fortmore, AICP  
Principal
June 9, 1999

Mr. Stanley T. Fujimoto
State of Hawaii
Housing and Community Development Corporation
677 Queen Street, Suite 300
Honolulu, Hawaii 96813

Dear Mr. Fujimoto:

Subject: Kalihi Valley Homes - Site & Dwelling Improvements

In response to the April 28, 1999 letter from Group 70 International, the draft environmental assessment for the subject project was reviewed. The following comments are the result of this review:

1. The first paragraph on Page 2-8 states that the entry roadway and parking lot off of Kamehameha IV Road will be reconfigured. A comparison of the existing configuration and the proposed reconfiguration should be provided.

2. The second paragraph on Page 2-8 states that a parking lot access roadway will be eliminated, making Kalaiwa Way a "dead-end" parking area. All "dead-end" City-jurisdiction roadways are required to include turnarounds that meet City and County standards.

3. Section 2.2.5 on Page 2-8 discusses how the project intends to comply with the Americans with Disabilities Act Accessibility Guidelines. Pathways to the main parking lot must be accessible. The Handi-Van service is curb-to-curb and does not service the interior parking lots/roadways of Kalihi Valley Homes at this time.

4. The information regarding existing roadways presented in Section 3.8 on Page 3-8 should be verified by a field check. A drawing showing the existing roadway configuration would help to clarify the corresponding description in the text.
Mr. Stanley T. Fujimoto  
June 9, 1999  
Page 2

Should you have any questions regarding these comments, please contact Faith Miyamoto of the Transportation Planning Division at 527-6976.

Sincerely,

[Signature]

cc: Ralph E. Portmore, AICP  
Group 70 International
September 30, 1999

Ms. Cheryl D. Soon, Director
Department of Transportation Services
City and County of Honolulu
711 Kapiolani Boulevard, Suite 1200
Honolulu, HI 96813

Subject: Kalihi Valley Homes - Site and Dwelling Improvements
Draft Environmental Assessment

Dear Ms. Soon:

Thank you for your June 9, 1999 letter to Mr. Stanley T. Fujimoto of the Housing and Community Development Corporation of Hawai‘i regarding your review of the Draft Environmental Assessment (Draft EA) for the above-referenced project. Our responses to your comments are provided below.

Reconfiguration of the Kamehameha IV Road Entry (page 2-8, first paragraph)

The proposed improvements involve realigning the parallel service road within the project (Kalena Road) so that its distance from the property line at this entry point is increased by approximately 60 feet. This will provide a short transition distance between the entry/exit point and Kalena Road, and thus make it possible for vehicles to make “regular” right and left turns when entering or exiting the project.

At this point the design of this reconfiguration is only conceptual. Detailed design plans will not be prepared until this phase of the project is undertaken, which will be five or more years from now. The concept is illustrated on Figure 2-1 (Page 2-8) in the Draft EA. This figure will also be included in the Final EA.

Kalaiwa Way Parking Area (page 2-8, second paragraph)

This will continue to be maintained as part of the project. There are no plans to have this parking area become a “City-jurisdiction dead-end roadway”.

ADAAG Compliance (Section 2.2.5, page 2-8)

Your comments concerning the need for accessible pathways and the fact that the HandiVan does not service the interior parking lots/roadways of Kalihi Valley Homes are acknowledged. A copy of your letter has been referred to the project architects to ensure that these concerns are addressed in the project design.
Information Regarding Existing Roadways (Section 3.8, page 3-8)

A field check has been made to verify existing roadway conditions and, where necessary, corrections have been made in Section 3.8 of the Final EA to the description of these conditions. References to figures that show existing roadway configurations have also been added to portions of the text describing these conditions.

Conclusion

Your letter and this response letter will be included in the Final EA. We appreciate your input on this project.

Sincerely,

GROUP 70 INTERNATIONAL, INC.

Ralph Portmore, AICP
Principal

cc: Mr. Roy Nishi, AIA
Group 70 International, Inc.
State of Hawaii
Housing and Community Development Corporation
677 Queen Street, 300
Honolulu, HI 96813

Attention: Mr. Stanely T. Fujimoto

Subject: Kalihi Valley Homes

Thank you for the opportunity to comment on your April 1999 DEA for the Kalihi Valley Homes, as proposed by the Housing and Community Development Corporation. We have reviewed the subject document and have no comments at this time.

HECO shall reserve further comments pertaining to the protection of existing powerlines bordering the project area until construction plans are finalized. Again, thank you for the opportunity to comment on this DEA.

Sincerely,

[Signature]

cc:
OEQC

Group 70 International, INC
925 Bethel Street, 5th Floor
Honolulu, HI 96813-4307
Attn: Mr. Ralph E. Portmore, AICP

Hawaiian Electric Company, Inc. • PO Box 2750 • Honolulu, HI 96840-0001
September 30, 1999

Mr. Scott W. H. Seu, P.E., Manager
Environmental Department
Hawaiian Electric Company, Inc.
P.O. Box 2750
Honolulu, HI 96840-0001

Subject: Kalihi Valley Homes - Site and Dwelling Improvements
Draft Environmental Assessment

Dear Mr. Seu:

Thank you for your June 9, 1999 letter to Mr. Stanley T. Fujimoto of the Housing and Community Development Corporation of Hawai'i regarding your review of the Draft Environmental Assessment (Draft EA) for the above-referenced project. We acknowledge your statement that you do not have any comments to offer at this time.

Your letter and this response letter will be included in the Final EA. We appreciate your taking the time to review this project.

Sincerely,

GROUP 70 INTERNATIONAL, INC.

Ralph Portmore, AICP
Principal
May 14, 1999

Mr. Ralph E. Portmore
Group 70 International
925 Bethel Street
Honolulu, HI 96813-4307

Dear Mr. Portmore,

Subject: Kalihi Valley Homes – Site & Dwellings Improvements
Draft Environmental Assessment
Honolulu, Island of Oahu, Hawaii
TMK: 1-3-22: 01

We have reviewed the draft environmental assessment for Kalihi Valley Homes site and dwellings improvements. There are no telephone-related comments in the draft environmental assessment on which we can comment on and therefore have no comments to offer.

Thank you for the opportunity to review and comment on this project.

Sincerely,

Jay Furukawa
Section Manager-Access Design and Construction
Infrastructure Provisioning

c: File
September 30, 1999

Mr. Jay Furukawa  
Section Manager - Access Design and Construction  
Infrastructure Provisioning  
GTE Hawaiian Telephone Company, Inc.  
P.O. Box 2200  
Honolulu, HI 96841

Subject: Kalii Valley Homes - Site and Dwelling Improvements  
Draft Environmental Assessment

Dear Mr. Furukawa:

Thank you for your May 14, 1999 letter regarding your review of the Draft Environmental Assessment (Draft EA) for the above-referenced project. We acknowledge your statement that you do not have any comments to offer at this time.

Your letter and this response letter will be included in the Final EA. We appreciate your taking the time to review this project.

Sincerely,

GROUP 70 INTERNATIONAL, INC.

Ralph Fortmore, AICP  
Principal

Francis S. Oda, AIA, AICP  
Norman G.Y. Hong, AIA  
Sheryf H. Setumun, AIA, AIA  
Hiuoki Hidah, AIA  
Ray H. Nilei, AIA, CSI  
James S. Nakamine, AIA  
Ralph E. Fortmore, AICP  
Stephen H. Yuen, AIA  
Linda L. Chung, AIA  

Paul P. Chomey, AIA  
Dean H. Kamura, AIA  
Norma J. Scott, AIA  
Stephen E. Calio, CPA  
George I. Aru, AICP  
Jeffrey H. Overton, AICP  
Kathryn A. Nam  
Roy A. Inouye, AIA, CSI  
Mary J. O'Leary, AICP  
Frank B. McQuaid, AIA  
Clair M. Assuncion, AIGA  
Christine M.卜naka, AICP  
Suzan M. Jow, AIA
June 16, 1999

Donald Lau, Executive Director
Housing and Community Development Corporation of Hawaii
677 Queen Street Suite 300
Honolulu, HI 96813

Dear Mr. Lau,

This is to inform you that, we, the Kalihi Valley Homes Resident Association Board, do support the demolition of 11 buildings at Kalihi Valley Homes that Group 70 had suggested.

We realize that what we have “dreamed” at the Charette a year ago can only happen with the demolition. Our first priority is the children and a place for them to play. Secondly, the community can gather in groups for developing deeper relationships with their many neighbors instead of being isolated in their homes. And thirdly, because of the spaces that will happen with the demolition, there will be more places for beauty and trees.

As you can see, we have touched all the goals that was brought out at our first meeting.

With much appreciation for allowing us to develop relationship with you, we are

Very sincerely yours

[Signatures]

President Alipopo Alipopo
Vice President Solomon Kuressa
Secretary Anna Salavea
Treasurer Sister Rose Anthony Tanio
September 30, 1999

Mr. Aipopo Aipopo, President
Kalihhi Valley Homes Resident Association
2246J Kalaunu Street
Honolulu, HI 96819

Subject: Kalihhi Valley Homes – Site and Dwelling Improvements
Draft Environmental Assessment

Dear President Aipopo and Association Board Members:

Thank you for your June 16, 1999 letter to Mr. Donald Lau of the Housing and Community Development Corporation of Hawai‘i in which you expressed the Board’s support for the proposed plans to improve the quality of the accommodations and the overall family living environment provided at Kalihhi Valley Homes. The success of this design effort is in large measure the result of the vision or “dreams” and priorities for your community that you shared with us at the design charrette.

Your letter and this response letter will be included in the Final Environmental Assessment. Copies of the Final EA will be provided for all Board Members upon its completion. Again, we greatly appreciate your input on this project. We look forward to continuing to work together with you as the project design and construction proceeds.

Sincerely,

GROUP 70 INTERNATIONAL, INC.

Ralph Portmore, AICP
Principal
Appendix A

Pre-Consultation Meeting Notes
CON_FERENCE_ R_EPORT
Group 70 International, Inc. • Architecture • Planning • Interior Design • Environmental Services
925 Bethel Street, Fifth Floor • Honolulu, Hawaii 96813-4307 • PH: (808) 523-5859 • FAX: (808) 523-5874

GROUP 70
INTERNATIONAL

Francis S. Oda, AIA, AICP
Norman G. Y. Hong, AIA
Sheryl S. Somma, AIA, ASID
Hiroshi Hida, AIA
Roy H. Hiei, AIA, CSI
James I. Nishimoto, AIA
Ralph E. Punimone, AICP
Stephen H. Yuen, AIA
Linda L. Chang, AIA

TO PARTICIPANTS FROM ROY H. NIHEI AIA

DATE SEPTEMBER 4, 1998 PLACE HON. COM. COLLEGE

PROJECT KALIHI VALLEY HOMES REDESIGN

PRESENT SEE ATTACHED LIST

SUBJECT KVH DESIGN CHARETTE

SEPT. 4TH H.C.C. DESIGN CHARETTE FOR KALIHI VALLEY HOMES

A. INTRODUCTION

1) Francis Oda AIA (Charette Facilitator) opened in prayer. Donald Lau (HCDCH Executive Director) made an opening statement:

2) Sister Rose Anthony K.V.H. statement:
   a. Desires for renovation of KVH.
   b. Issued questionnaire/survey last Saturday to the residents.
   c. Oct. 31 event discussion at Farrington H.S.
   d. Resident participation (HUD Sect. 3).
      - Resident labor.
      - Requests space and time for discussion.

3) Frank Ifuku of HCDCH assures that we have similar aim.

4) Attendance introductions.

B. DESIGN/CHARETTE PROCESS

1) Francis noted that the goal is to identify the lifestyle of the residents as it translates to major themes related to possible improvement for the project. The improvements will be prioritized later to see what can be included in the overall project cost.

UNLESS WRITTEN OBJECTION IS RECEIVED WITHIN SEVEN DAYS, WE ASSUME STATEMENTS CONTAINED WITHIN ARE ACCEPTED.
2) **Design Methodology:** 5 step process:
   a. Lifestyle: (Understand lifestyle of client).
   b. Major Themes (Major goals)
   c. Configuration (Physical architecture)
   d. Sub-themes (To reinforce major themes)
   e. Details (To support sub themes - not just buildings)

**C. LIFESTYLE**

1) **Lifestyle issues:** Understand different perspectives on how to build a community.

   a. **Positive things about KVH.**
      1. Good security with neighborhood patrols
      2. Separation at outdoor area
      3. Buffer public/private
      4. People oriented
         (a) Know your neighbor
         (b) Linear plan of housing is not helpful
         (c) Plantation pride - Smaller units not large as we see today.
         (d) People took care of each other.
      5. Certify people in the community to train for employment within the community.
      6. Build spirit by training.
      7. Different between building. No fear to communicate at Bldg. 19.
      8. Usually you get to know the parents through the children.
      9. Renovations have started.
     11. Layout should promote interaction to enhance safety.
         - Humble leaders.
         - Clothing, the way we live and our house are an expression of ourselves.
     13. Site is potentially a good site similar to Nuuanu.
     14. Multi cultural as plantation.
         - There is a prayer life in the families, no need for a physical church in the community.
         - Guardians call their children for the 6:00 prayer.
     15. Curfew - A tradition Samoans grew up with.
         - A sense of responsibility.
         - Children regardless of age come in at 6:00 p.m.
     16. Minister - Importance of discipline/parents responsibility
         - Thankful for housing.
     17. Neighborhood security meetings. The importance of asking the Lord to go before them.
         - Cultures represented: Samoan, Vietnamese, Japanese, Latin, Micronesian, Chinese, Filipino, Mixed, and Cambodian.
     18. Style of interaction: The need for more face to face talks as opposed to a physical structure for that purpose.
     19. Collaboration is a value between management and resident ways to reach the people.
     20. Language barrier/interpreter.

*UNLESS WRITTEN OBJECTION IS RECEIVED WITHIN SEVEN DAYS, WE ASSUME STATEMENTS CONTAINED WITHIN ARE ACCEPTED.*
b. Negative things about KVH:
   2. No area to celebrate cultural activity.
      - Japanese Bon Dance
      - Filipino music
      - Samoan /Tongan culture
      - No opportunity to combine activity.
   3. No play areas for children.
   4. Suggest common areas between buildings but suggest an attention to age appropriateness.
   5. Physical separation of uptown/downtown rivalry.
   6. Currently, we have a limited space to work with.
   7. Need spiritual continuity in the community.
   8. Kalihi Valley rain makes sidewalks slippery.

2) Future goal: 10 years from now “What would you like to see passed on to the next generation?”
   a. Job Programs.
   b. KVH a place where kids can get trained.
   c. Provide jobs (i.e. Security company hired 17 people from KVH). Jobs give people pride.
   d. Capacity to build leaders.
   e. Opportunity to get involved.
   f. Accessibility: How are new residents reached?
      - Approached but hesitant to come out.
      - Should develop a sense of "Aloha".
      - Lack of acceptance and invitation will manifest in rebellion and anger.
   g. Provide programs for new kids coming in to housing.

3) Lifestyle For Different Age Groups:
   a. Res. Age 16-21: Hope the Parent's anger is not transferred to children. No continuity between what is the target at school and what is the target at home. Negative attitude.
   1. Problems:
      a. Gangs
      b. Abuse and real generation gap problems.
      c. Families/company can address.
      d. Positive Conversation Group to activities.
      e. Security issue as a problem. Asked for fence as security measure.
   2. Remedy:
      a. Gym
         - Separate the age groups.
         - Housing units close to gym are not safe (Drinking at gym).
         - Soundproof gym requested.
      b. Family is part of the solution.
      c. Programs must come not only from top down but also from the community.
      d. Schools programs not reaching out to parents to bring kids, parents together.
3. Defensible space:
   (a) Zones define areas that are personal.
   (b) Kamehameha Housing: Site visit shows a positive image with self-policing. Even though the Farrington H. S. kids go through property it is clear to kids where they should be and shouldn't be.
   (c) "Headstart" tried to come in to the Kamehameha Housing community center but the facility was not adequate.
   (d) "Headstart" is only available on limited bases because of lack of money and personnel.
   (e) K VH Community Center too small. Kids overrun area (upstairs).
   (f) Intermediate 6th grade to 9th grade neglected. Looking to be independent.
   (a) Need a place for kids to come together.
   (b) Younger kids get all attention.
   (c) Older kids independent.

b. Teens
1. Middle kids neglected, no space of their own, no identity.
2. Suggestion: Gymnasium, Leadership programs.
3. Drug and sex education is very important. Problem: we educate kids but not the parents.
4. Gymnasium may cater to males however dancing has been very successful to both sexes.

c. Elderly
1. Growing number
2. Accessibility will be an issue and challenge.
3. How can we make the elders life better?
4. Respect missing in America for elders.
5. Older kids have a different language.
6. Abuse of smaller kids by older kids;
7. Mixing may be negative.
8. Seniors known to care for smaller children. "Kupuna Programs".
9. No opportunity to age-in-place. This is why there is an increasing numbers of Assisted Living Facilities.
10. Elders seen as having a high priority to care for their grand children.
11. There may be programs to get kids to help the elderly with their yards.
12. Kupunas want to come out to associate but don’t feel safe doing so.
13. They also don’t come out because of sloping site conditions.
14. Some people are elderly by disability.
15. Opportunities to provide ways for interaction (street, elders/teens).
16. Idea to provide “soup kitchen”.
17. Senior citizen group, good idea but the community center is not accessible.

----------
UNLESS WRITTEN OBJECTION IS RECEIVED WITHIN SEVEN DAYS, WE ASSUME STATEMENTS CONTAINED WITHIN ARE ACCEPTED.
D. MAJOR THEMES

1) Major Themes
   a. Think not only of KVH but also areas surrounding the community.
   b. Determine Major Themes:
      1. Security
      2. Relationship (Plantation Community)
      3. Building of Spirit: Pride
      4. Economic Package
         - Job training programs/membership from Business Community
         - Job opportunities
         - Tennessee Example of Junior Leaders, Black/White bond.
      5. Areas for age group gathering places.
      6. Needs of children
      7. Development of leadership
      8. Beautification Strategy
      9. Hope and Vision
   c. Challenge now is to identify the main core values of no more than 5 major points. Should summarize what KVH is all about.
   d. The purpose of major themes is to guide us while we design in physical sense.
   e. Community Building Pride
      1. Community Center
      2. Children, Elderly
      3. Leadership
   f. Change stigma of second class citizens
   g. “Quality of Life” too general but key as a goal.
   h. Suggestion to focus on specific product so residents can have an idea of what to expect. Not just dreams and visions and promises.
   i. Participation is needed from the top down and bottom-up. We are talking about things that are doable.
   j. Five Major Themes:
      1. Secure Community
      2. Community Built on Relationships
      3. Community with Pride and Spirit
      4. Community of Economic Opportunity
      5. Beautiful Community

2) Relationship of KVH to the Community.
   a. Community and values
      - Seen as part of Kalihi
      - Community within a community
      - Rich resources: police station, district park
      - KVH values the environment.
      - Green around the area
      - Recycle programs
      - Graffiti clean up.
   b. “Trapped in the Valley”
      - Hesitation to participate in community because of hidden past.

UNLESS WRITTEN OBJECTION IS RECEIVED WITHIN SEVEN DAYS, WE ASSUME STATEMENTS CONTAINED WITHIN ARE ACCEPTED.
- Start to “look” like housing and residents will act and have self-esteem of “housing”.
  c.  Suggestion to change name of “KVH Housing” to change the image.
  
d.  Physical Feature Issues
  1.  KVH similar to Paliolo Valley Housing
  2.  Density: KVH 16 units per acre
      a.  Kamehameha Housing at 12 units/acre has a configuration conducive to
           relationships.
  3.  The Subdivision across the highway is 5-6 houses per acre.
  4.  K.P.T.: Kuhio Homes (High rise) sense of grouping and opportunity to relate.
      a.  Similar to KVH density
      b.  Relationship to neighbors
      c.  Gardening
  5.  Kuhio Park Terrace: 45 units/acre. High-rise densities are detrimental to communities.
      a.  no ownership of “no-man’s land”
      b.  no one knows each other.
  6.  Major Wright: 24 units/acre. Mid-rise densities are detrimental to communities.
      a.  3 story buildings.
  7.  KVH - Two story units with on grade entries are an asset. Challenge of High density
      situation to achieve goals. Need strong cultural overlay.
  8.  Physical Issues: Currently living in a past /inherited design that does not relate to the
      concept of a home.

E.  FIVE MAJOR THEMES

1)  Secure Community.
  a.  Entry gate
      -  Bad condition
      -  Not safe for elderly
  b.  Accessibility - Add to openness.
  c.  Inaccessible - Bldg 23, Front parking, up and down.
      -  Dark and burglary problems.
  d.  Accessibility to emergency personnel.
  e.  Problem areas
      1.  Trashbin Areas
      2.  Access between buildings not well lighted.
      3.  Likelike entry dangerous
      4.  Kam IV entry very dangerous
      -  Kids play on the street.
      -  Visitor entry (passes at guard shack) is very shallow.
      5.  Second floor tenants no control on their steps and laundry area.
      6.  Bldg 29, the slope is used as a passageway to the parking lot - suggest building stairs.
          People currently making own stairs.
      7.  No opportunity to have neighborhood watch because of the current configuration.

2)  Community Built on Relationships.
  a.  How we see each other.
  b.  Privacy, ability to see larger area.
  c.  Issue of spying on one another if design configuration promotes neighborhood watch.

UNLESS WRITTEN OBJECTION IS RECEIVED WITHIN SEVEN DAYS, WE ASSUME STATEMENTS CONTAINED WITHIN ARE ACCEPTED.
d. Example of Kam Housing that maintained a density of 12 units/acre while opened up spaces. However, not including elderly houses, which would actually increase density.
e. Current KVH configuration doesn’t help relationships between people.
f. Need community center (much more than a box) where children play since that’s how parents meet.
g. Outdoor and indoor recreation.
h. Outdoor Recreation: central and areas around the buildings.
i. Find out how we can use small front yards.
j. Sparse placement of play areas.
k. What about the bigger kids? May not be able to put everything on-site
l. Open space is good.
m. Recreation Center across Kam IV Road does not have a good relationship because it is shared with K.P.T. (danger zone, fights).
n. If we can supervise the Kan IV Recreation Center, can it be a resource to KVH?
   1. Can we achieve a spirit of sharing it with K.P.T.?
   2. Still a possibility.
   3. Large field is available.
   4. Participation is two ways - housing and community.
   5. Suggestion to work between K.P.T. and K.V.H.’s leadership.
   6. Every human needs a center.
   7. As teens grow-up they want to know where the rest of his classmates are “hanging out”. Recreation Center may be a place to go but not hang out.

o. Young Adults are taking an interest in the park area above the KVH Community Center. They hang out there and have been cleaning it out. Ownership is taking place. Retaining walls are all possible.
p. Buildings around the community center may need to be demolished to provide open play space for the children and teenagers
q. Change Community Center from a dividing line to a unifying line.

3) Community with Pride and Spirit:
a. Trash collection must be improved.
b. Kalii Valley has uplift winds that spread out trash and odor.
c. Individual trash pick up, example other projects, like regular neighborhood.
d. Better lighting system.
e. Postal system is vandalized and also not able to accept large packages.
f. Parking areas are not visible to resident and do not have enough guest parking.
g. Assignments are not enforced which causes problems between residents.
h. Bus stop stations in the community. Bus currently goes through project.
i. Options for parking:
   1. Structure parking (dangerous). $15-20,000/car
   2. Kam Housing central parking, example one parking stall/house unit.
   3. Challenge is not just to provide more stalls, but to make them reasonably close to units. Understand there will be trade offs.
j. Laundry Areas: Not protected, no dryers because of inadequate electrical shared lines

4) Community of Economic Opportunity:
a. Job opportunity is to have residents contracted to work on project. Example, Alger. Pre-requisites at Alger is to be drug-free
   1. Helps to make good community
2. Helps to enhance self-esteem
3. Helps to develop skills
b. Central Kitchen: full use, ethnic foods
c. Child Care
   1. In the Housing
   2. Now exists in the Housing
   3. Is it permitted?
d. Entrepreneur Project
   1. People in the project to offer skills.
   2. Networking with the community.
   3. Possibility to provide incubator facilities for budding businesses off site.
e. "Hire in-house"
   1. Maintenance is problem
   2. How do we get the people not certified to work.
   3. Alberg contractor trained people
   4. Apprenticeship programs
   5. Landscape big opportunity to develop skills. Built with "inside" workers.
   6. Suggest to convert five bed unit or whole building for job search.

5) Beautiful Community.
   a. Internally and express outwardly
   b. Image is of barracks and public housing
   c. Configuration of rows of houses is not friendly.
   d. Lack of Landscaping. Parking landscaping not to code.
   e. Addition of large trees.
   f. House (symbolic)
      1. Entry, Roof (traditional), windows.
      2. Flat roof of the 50's, no identity, machine for living.
      3. Could we make it a park, with homes?
   h. Humanize the environment (not de humanize)
      1. Individuality
      2. Neighborhood
      3. Village inside a park
   i. Roofs could help to individualize and start to fit in to community
   j. Knowledge and education to the residents.
   k. Rename to Kalbi Village Park?
   l. HUD regulation to hire unskilled residents.
   m. Landscaping training so residents can maintain.
   n. Practical landscaping can be an option, edible stuff
   o. Participation
   p. Color changes
   q. Privacy around units
   r. Outdoor lighting
   s. Visitor parking as a result of better self-esteem
   t. B.B.Q. areas
      1. At nodes of play
      2. Not at center since too far from units
      3. At back yard
   u. Windows look old, cleaning is a problem at upper level, new ones needed/vent/light

UNLESS WRITTEN OBJECTION IS RECEIVED WITHIN SEVEN DAYS, WE ASSUME STATEMENTS CONTAINED WITHIN ARE ACCEPTED.
F. CONFIGURATION

1) Sketch at Building Elevation.
   a. Sloped roofs will give a residential “look”.

2) Sketch at Building Floor Plans.
   b. Leadership issue to keep junk out
   c. Front yard – add semi-private front yard as a buffer zone.
   d. Back yard - enclosed back yard/laundry area
   e. Use overhang, eyebrow roofs not structurally sound, currently used as a path for kids to steal.

3) Improvements
   a. New kitchen flooring.
   b. Sliding door to front yard or back yard with minimum privacy.
   c. C & D units: add ½ bath to make it 1-1/2 baths
   d. Design for elderly
   e. Senior and infrastructure

4) Wrap-Up
   a. Have we achieved our goals?
   b. In a linear configuration we cannot solve relationship.
   c. Space to build church

G. CLOSING

1) Ron Lim (HCDCH): Community based planning is new for the agency and noted that today was very successful.

2) Sister Rose: Close in prayer

3) End session at 3pm.
CONFFERENCE REPORT

GROUP 70 INTERNATIONAL

FROM: Steve Yuen

DATE: Sept. 17, 1998

TO: File

PROJECT: Kalihi Valley Homes Redesign

SUBJECT: Resident Board Meeting at Kalihi Valley Homes, 10:00 - 11:30 a.m.
Resident Board Present
Concept Progress Review/Follow-up from 4 Sept 98 Charrette

Pin-up and review of supporting drawings which support the major themes.

Acknowledgement that pricing has not been done and that it may affect the design.

Presentation by Group70 as follows:

A. Introduction of Major Themes:

1. Secure Community
2. Community Built on Relationships
3. Community with Pride and Spirit
4. Community of Economic Opportunity
5. Beautiful Community

B. Site issues:

Presentation of Site Plan Alternatives drawing.

1. Density. Existing 16.7 Dwellings/Acre may be considered too high to allow for the successful implementation of the major themes. Three alternative site plans pose reductions in buildings:
2. Existing Site Plan: 45 buildings, ~400 units;
   a. Alternative 1: Charrette Starting Point—Remove 7 buildings to create open spaces, ~33 units;
   b. Alternative 2: Taking into account the hillside topography to reconfigure open spaces remove 8 buildings, ~328 units;
   c. Alternative 3: Improved Density to ~12.5 Dwelling/Acre (similar to Kamehameha Homes); enhanced open space areas; improved access and adjacency to parking areas—Remove 11 buildings, ~561 units.

C. Meeting Discussion:

1. Moving/Relocation/Phasing Issues:
   a. Typical ~10-12 units turnover per month;
   b. Current ~20 units vacancy;
   c. The project should try to be implemented in phases to take advantage of the natural vacancy/turnover rate so that no one should be forced to leave the project.

2. Site Alternative Comments:
   a. Alternative 3 provides the most "breathing room" for the site and between buildings.
   b. Current density is too high, so as long as relocation issues can be resolved, Alternative 3 is desirable.
   c. Aside from the main central open space, a number of smaller open spaces may better serve the layout of units and buildings than a fewer, larger number of open spaces.

3. Unit Size (Number of Bedrooms) Comments:
   a. Not today, but we might be looking at the 4 and 5-bedroom units to reconfigure them into 2 ~400 units;
   b. 4 and 5-bedroom units are needed in the project;
   c. Keep the 1, 2, 3, and 4-bedroom units: by reconfiguring the 5-bedroom unit, families will not double up;
   d. For our next meeting, Group 70 will go further into unit plans pros and cons, and will present a study on resulting density alternatives.

4. Conclusion:
   a. The general consensus was to proceed with Site Alternative 3.

D. Remodeled Building Elevations:

1. Presentation of Building Elevations drawing in before and after format.

2. Review of characteristics used in creating the look of the buildings and open spaces: Community as a village; a group of families living in a park.
3. Description of building elements:
   a. Roofs: asphalt shingles like the houses across the street;
   b. New, easy to clean windows, either sliders, or jalousies with durable plastic or acrylic frames;
   c. Slanted skirt roofs above the first floor – for human scale;
   d. Units shown with front entry lanai, porch, and front door with individual design identity, with porch entry defined by small low fence or shrubs.

4. Comment on storage: suggestion to use the attic and knee wall space of the skirt roofs for storage (“personal storage” of things like Christmas stuff, picnic stuff, chairs, suitcases).
   a. Group 70 response: the finishing(dry wall and painting, electric, ventilation requirements, etc.) of attic and knee wall spaces would be prohibitively costly and storage issues would be typically addressed within the layout of the unit floor plan designs.

5. Conclusion:
   a. The general consensus was that the proposed elevation concept was an overwhelming improvement over the existing building elevation.

E. Remodeled Typical 3 Bedroom Plan Concept:

1. Presentation of unit plan concept alternatives in before and after format.

2. Review of conceptual agreements on unit design and front yards and backyards from the 4 September charrette.

3. Description of unit plans elements:
   a. New backyard concept with dining room and glass sliding door facing out;
   b. New kitchen layout with increased counter space;
   c. New bathroom fixtures and closet sliding doors upstairs;
   d. New front entry, lanai and porch alternatives: Bay window, new covered porch/lanai, and expanded living room.

4. Meeting Discussion:
   a. Big families will like the expanded living room alternative. Group 70 noted that this alternative proposes the removal of an existing exterior wall and that a column might be required near the front door, and further structural analysis was needed;
   b. The bay window alternative might be appropriate for the 2-bedroom units;
   c. The lanai alternative should be configured and sited appropriately to address wind and rain considerations;
   d. The selection and distribution of front entry, lanai and porch alternatives will limited by the available space in front of the building, due to the location of the walkways and sloping conditions.

5. Conclusion:
   a. Group 70 should maintain a variety of alternative front entry solutions which should respond to unit sizes and site conditions.
F. Planning of activities and uses for the 5 smaller neighborhood open spaces and the main community open space:

1. Presentation of a typical neighborhood open space plan. Meeting discussion to identify potential uses for the open spaces.
   a. Barbecue and picnic tables;
   b. Tot lois and playground equipment. This use could be provided at the main community open space; if it additionally occurs at the smaller neighborhood open spaces, these might be built as a neighborhood project, given the cost of this use;
   c. Bazaars or fairs. This use might also be more appropriate at the main central open space;
   d. Football and playfield areas requiring a level area. Similarly, these uses might be more appropriate at the main central open space;
   e. Main community open space uses: basketball courts, gymnasium, water fountains, trash cans, night lighting; availability of bathrooms in proximity to the courts;
   f. Adult exercise.

2. Conclusion:
   a. The appropriate mixing and separation of uses is a key element to the successful design and development of the open spaces;
   b. Avoid small and big kid mixing by providing spaces for both;
   c. Separate passive and active uses.

G. Additional Site and Community Uses: Meeting Discussion.

1. Community Mail room. As an alternative, possibly 2 satellite mailrooms. Or possible mail delivery to secure mail boxes. This issue requires follow-up discussion and definition.

2. Resident Management Offices;

3. Trash collection. Rather than big dumpsters, possibly implement a “trash day” system with trash bag pick up. Currently, other projects use this system.

4. Walkway drainage issues. Currently certain back walkways are subject to water problems and new work should address this problem.

5. Landscape issues. New topsoil needs to be brought in. The current conditions make the growing of plants difficult.

H. Meeting Conclusions/Follow-up:

1. The residents will be having a general meeting and requested the presence of Group 70 to review the preceding presentation and provide any progress updates.

2. Roy noted that the cost will need to be confirmed before presentation to the residents.
Welcome
Open Prayer
Introductions
Presentation

Questions responding to presentation.

1. When will the renovation be completed?
   Oda responded, the renovation is to be done in phases. The red representing year 2000, blue
   representing 2001 and so on. (The phasing plan was used to illustrate the phasing).

2. How much money will this renovation/demolition cost?
   HCDCH representative responded, the first (2) phases are estimated at 5mil.

3. If the total cost to renovation KVH is 60mil, where will this money come from and how long
   will it take to finish the entire renovation?
   HCDCH representative responded, the money is part of the Comprehensive Grant Program.
   HFA can not commit the entire amount, the renovation must be done in phases. The Federal
   Government has strict guidelines which sets the renovation budget on an annual basis.

4. Will the rent go up?
   HCDCH representative responded, no, the rent is based on a percentage of your income. In
   this case, rent is not affected.
5. Is there space reserved for a church?
   Oda responded, there is not a specific area, but there is a community hall where these kinds of events may take place.

6. Architecturally, this plan is very appealing, but what kind of security system will be put in place?
   Oda responded, there will be locks on every unit. The unit is very secure. The idea with this type of design is to build a security system within the community. Especially, with your neighbors. Leadership networking, economic solving efforts, programs must all be established to create a sense of community.

7. According to this plan, it appears that many building will be demolished. Where will I live in the mean time?
   Oda responded, the current turnover is about 1/3 per year. With this turnover rate, no one will have to move. You may have to move to a different unit, but no one is expected to have to move out of KVH.

8. Are there any plans to put more parking on the mauka end.
   Oda responded, no, there will be no additional parking than what is currently there now. But we will look into possibly putting in additional stalls.

9. Last December, we were faced with restrictions of the demolition process. HUD did not allow for any demolition of buildings. Have we moved forward with this? Have we submitted the application?
   HCDCH representative responded, the Federal Government (HUD) is requiring a clarification before they approve the application, since this demolition is considered a part, not full. We will still go forth with phase one as planned, but the application will still be in process.
Appendix B
Kalihi Valley Homes Renovation Survey
October 14, 1998

Mr. Roy Nihei
Group 70 International
925 Bethel Street, 5th floor
Honolulu, Hawaii 96813

Dear Mr. Nihei:

Subject: Results of Kalihi Valley Homes Renovation Survey Conducted By Faith In Action For Community Equity (FACE)

We transmit for your use the final summary results and questionnaire for the Kalihi Valley Homes survey conducted by FACE on August 29, 1998. Please review the results and incorporate in your design, items which are eligible, necessary and affordable.

Should you have any questions, please contact Mr. Harold Kurihara, Housing Development Administrator at 587-0525.

Sincerely,

[Signature]

Donald K. W. Lau
Executive Director

Enclosure
A. Physical Conditions

- Maintenance Needed/Urgency—In nine areas there were 70% or more 'yes' responses, meaning that 70% needed maintenance, and a corresponding 'high priority' rating ranging from 30% to 67% of responses.
  - Exterior Items
    - #4. Drives, parking lots, paving, curbs
    - #7. Doors, windows, screens
    - #11. Exterior painting
  - Interior Items
    - #14. Floors, carpets, tiles
    - #16. Cabinets, doors, closets, hardware
    - #17. Painting
    - #22. Plumbing fixtures and systems
  - Miscellaneous
    - #28. Exterminating
    - #29. Fire extinguishers

- #20. Garbage disposal and exhaust fans, is N/A. There are no disposals or fans at present, however, the residents would like them.

- #23. Heating and air-conditioning, is N/A. There are no heating or air-conditioning units at present, however, the residents would like air-conditioning.
B. Renovation

➢ A majority of affirmative responses were received regarding an adequate number of bathrooms, #2.b., water pressure, #9., landscaping, #17., and community room, #18; however, the “Comments” reveal specific concerns in these areas.

➢ Counter, cabinet, sink, closet & storage space, #4., ventilation, #6., block safety, #11., paint color choice, #12., exterior lighting, #13., other safety concerns, #14., adequate play areas, #15., are items that a majority of respondents would like to see included in the renovation plan.

➢ #7., Do your garbage disposal and exhaust fans work adequately? This question is N/A.

➢ #16., Do you think that adding more apartment units...will help or hurt the project? A majority responded ‘no’ to adding more apartments.

➢ The following is a list of items from the “Comments” section of the survey that pertain to renovation:

- New paint is needed, both inside and outside the units.
- Doors, locks and screens need to be replaced.
- Flooring needs to be upgraded.
- Existing cabinetry needs to be replaced; additional storage is needed.
- Overall spaces are cramped, especially kitchens and bedrooms.
- Bathrooms are needed downstairs; handicap accessible.
- Sinks, faucets and piping need to be repaired.
- Large bathtubs were requested.
- Stoves mentioned most often needing replacement.
- Exhaust fans in kitchen and bathrooms requested.
• Garbage disposals requested.

• Electrical outlets need replacement and safety features.

• Water pressure and safe temperature needs to be maintained.

• Additional guest parking and resident parking spaces closer to assigned unit.

• Security windows, fencing, brighter exterior lighting, fire extinguishers and other privacy/safety measures requested.

• Elimination of exposed wires and roof pipes requested.

• Exterior stairs and walkways made safer, handicap accessible, and non-slip.

• Three general areas were designated for playgrounds, the middle, and both ends of property. Safety concerns were type of equipment (plastic preferred over metal), fencing and located away from roads and highway.

• Additional trees requested.

• Roads and pavement throughout property need improvement.

• Community room needs easier access, more space, kitchen renovation, possibly separate areas for different ages.
C. Employment Opportunities

➢ A number of respondents and/or household members would be willing to take a job training opportunity, #5, #6, #7.

➢ One hundred seventy-one already have skills related to construction/renovation work, #8.
Guide to tables

A. Physical Conditions

Table A., includes the total numbers of ‘yes’ and ‘no’ responses to the question of maintenance needed for the items listed, and the corresponding percentages of ‘yes’ responses. It also illustrates the level of urgency indicated by the number and percentage of responses to the question of whether it is high, medium or low item.

A.2. Physical Conditions Ranked

Table A.2, is the data sorted by percentage of ‘yes’ responses to the question of maintenance needed.

B. Renovation

Table B., ‘yes’ or ‘no’ responses are specific to each question asked. Multiple part questions are indicated by footnotes below the ‘yes’ and ‘no’ portion of the table.

C. Employment

Table C., ‘yes’ or ‘no’ responses are specific to each question asked. Multiple part questions are indicated by footnotes below the ‘yes’ and ‘no’ portion of the table.
# A. Physical Conditions

<table>
<thead>
<tr>
<th>Item Description</th>
<th>MAINTENANCE</th>
<th>URGENCY</th>
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<tr>
<td><strong>Exterior Items:</strong></td>
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<tr>
<td>1. Exterior Walls and Foundation</td>
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<td>78</td>
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<tr>
<td>2. Roofs, flashing, vents</td>
<td>139</td>
<td>95</td>
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<tr>
<td>3. Gutters, downspouts</td>
<td>148</td>
<td>79</td>
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<tr>
<td>4. Drives, parking lots, paving, curbs</td>
<td>176</td>
<td>61</td>
</tr>
<tr>
<td>5. Walks, steps, guardrails</td>
<td>145</td>
<td>97</td>
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<td>6. Fences, walls, gates</td>
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<td>85</td>
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<td>7. Doors, windows, screens</td>
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<td>8. Lawns and plantings</td>
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<td>75</td>
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<tr>
<td>9. Sprinklers and drainage system</td>
<td>144</td>
<td>70</td>
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<tr>
<td>10. Exterior lighting</td>
<td>169</td>
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<td>11. Exterior painting</td>
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<td>12. Underground gas, water, sewage</td>
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<td>13. Security systems</td>
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<td><strong>Interior Items:</strong></td>
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<td>14. Floors, carpets, tiles</td>
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<td>15. Stairs, walkways, community spaces</td>
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<td>16. Cabinets, doors, closets, hardware</td>
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<td>17. Painting</td>
<td>179</td>
<td>63</td>
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<td>18. Curtains and shades</td>
<td>132</td>
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<td>19. Refrigerators and ranges</td>
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<td>20. Garbage disposal and exhaust fans</td>
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<td>21. Electrical fixtures and systems</td>
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<td>22. Plumbing fixtures and systems</td>
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<td>23. Heating and air-conditioning</td>
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<td>24. Hot water system, boiler room</td>
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<td>25. Exit Doors/Jams</td>
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<td><strong>Miscellaneous:</strong></td>
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<td>26. Benches, play area and equipment</td>
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<td>54</td>
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<td>27. Project signs and office</td>
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<td>50</td>
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<td>28. Exterminating</td>
<td>153</td>
<td>66</td>
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<tr>
<td>29. Fire extinguishers</td>
<td>161</td>
<td>51</td>
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### A.2. Physical Conditions Ranked

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<tr>
<th>Priority</th>
<th>A. Physical Conditions</th>
<th>MAINTENANCE</th>
<th>URGENCY</th>
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<td>Heating and air-conditioning</td>
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<td>2</td>
<td>Doors, windows, screens</td>
<td>194: YES 45: NO TOTAL 81%</td>
<td>36: HIGH 23: MED 10: LOW 1: N/A</td>
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<td>3</td>
<td>Floors, carpets, tiles</td>
<td>187: YES 50: NO TOTAL 79%</td>
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<td>4</td>
<td>Cabinets, doors, closets, hardware</td>
<td>192: YES 54: NO TOTAL 76%</td>
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<td>Fire extinguishers</td>
<td>161: YES 51: NO TOTAL 78%</td>
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<td>6</td>
<td>Exterior painting</td>
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<td>7</td>
<td>Drives, parking lots, paving, curbs</td>
<td>178: YES 61: NO TOTAL 74%</td>
<td>34: HIGH 19: MED 5: LOW 5: N/A</td>
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<td>8</td>
<td>Painting</td>
<td>179: YES 63: NO TOTAL 74%</td>
<td>33: HIGH 27: MED 11: LOW 4: N/A</td>
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<td>9</td>
<td>Plumbing fixtures and systems</td>
<td>170: YES 69: NO TOTAL 71%</td>
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<td>10</td>
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<td>12</td>
<td>Project signs and office</td>
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<td>23: HIGH 16: MED 10: LOW 3: N/A</td>
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<td>13</td>
<td>Exterior Walls and Foundation</td>
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<td>27: HIGH 35: MED 15: LOW 9: N/A</td>
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<td>14</td>
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<td>25: HIGH 19: MED 9: LOW 7: N/A</td>
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<td>15</td>
<td>Refrigerators and ranges</td>
<td>159: YES 81: NO TOTAL 66%</td>
<td>32: HIGH 20: MED 8: LOW 6: N/A</td>
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<td>16</td>
<td>Gutters, downspouts</td>
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<td>25: HIGH 26: MED 11: LOW 9: N/A</td>
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<td>17</td>
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<td>18</td>
<td>Exterior lighting</td>
<td>159: YES 91: NO TOTAL 64%</td>
<td>24: HIGH 20: MED 8: LOW 2: N/A</td>
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<tr>
<td>19</td>
<td>Electrical fixtures and systems</td>
<td>147: YES 90: NO TOTAL 62%</td>
<td>24: HIGH 20: MED 8: LOW 3: N/A</td>
</tr>
<tr>
<td>20</td>
<td>Lawns and plantings</td>
<td>121: YES 75: NO TOTAL 62%</td>
<td>23: HIGH 16: MED 8: LOW 5: N/A</td>
</tr>
<tr>
<td>21</td>
<td>Fences, walls, gates</td>
<td>135: YES 85: NO TOTAL 61%</td>
<td>21: HIGH 17: MED 8: LOW 1: N/A</td>
</tr>
<tr>
<td>22</td>
<td>Exit Doors/Jams</td>
<td>132: YES 88: NO TOTAL 60%</td>
<td>23: HIGH 21: MED 10: LOW 4: N/A</td>
</tr>
<tr>
<td>23</td>
<td>Walks, steps, guardrails</td>
<td>145: YES 97: NO TOTAL 60%</td>
<td>24: HIGH 19: MED 8: LOW 7: N/A</td>
</tr>
<tr>
<td>24</td>
<td>Roofs, flashing, vents</td>
<td>139: YES 95: NO TOTAL 59%</td>
<td>21: HIGH 26: MED 11: LOW 5: N/A</td>
</tr>
<tr>
<td>25</td>
<td>Curtains and shades</td>
<td>132: YES 91: NO TOTAL 59%</td>
<td>19: HIGH 17: MED 8: LOW 5: N/A</td>
</tr>
<tr>
<td>26</td>
<td>Benches, play area and equipment</td>
<td>117: YES 84: NO TOTAL 56%</td>
<td>31: HIGH 14: MED 7: LOW 5: N/A</td>
</tr>
<tr>
<td>27</td>
<td>Stairs, walkways, community spaces</td>
<td>132: YES 98: NO TOTAL 57%</td>
<td>23: HIGH 17: MED 7: LOW 4: N/A</td>
</tr>
<tr>
<td>28</td>
<td>Hot water system, boiler room</td>
<td>140: YES 121: NO TOTAL 54%</td>
<td>19: HIGH 16: MED 6: LOW 3: N/A</td>
</tr>
<tr>
<td>29</td>
<td>Underground gas, water, sewage</td>
<td>116: YES 105: NO TOTAL 52%</td>
<td>24: HIGH 19: MED 9: LOW 3: N/A</td>
</tr>
</tbody>
</table>
### B. Renovation

#### Changes:

<table>
<thead>
<tr>
<th>Question</th>
<th>YES</th>
<th>NO</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.b. Is your unit large enough for your household size?**</td>
<td>134</td>
<td>120</td>
<td>254</td>
</tr>
<tr>
<td>2.b. Would you like more bathrooms?***</td>
<td>130</td>
<td>215</td>
<td>345</td>
</tr>
<tr>
<td>3. Does your kitchen function adequately?</td>
<td>124</td>
<td>105</td>
<td>229</td>
</tr>
<tr>
<td>4. Are your counter, cabinet, sink, closet &amp; storage space adequate?</td>
<td>129</td>
<td>138</td>
<td>267</td>
</tr>
<tr>
<td>5. Do your appliances work properly?</td>
<td>132</td>
<td>100</td>
<td>232</td>
</tr>
<tr>
<td>6. Does your apartment have enough ventilation?</td>
<td>114</td>
<td>128</td>
<td>242</td>
</tr>
<tr>
<td>7. Do your garbage disposal and exhaust fans work adequately?</td>
<td>138</td>
<td>107</td>
<td>245</td>
</tr>
<tr>
<td>8. Do you have adequate water pressure for your showers and/or baths?</td>
<td>166</td>
<td>81</td>
<td>247</td>
</tr>
<tr>
<td>9. Do you feel safe in your building? On your block?</td>
<td>114</td>
<td>114</td>
<td>228</td>
</tr>
<tr>
<td>10. Would you like your building to be painted a certain color? What color would you like?***</td>
<td>137</td>
<td>93</td>
<td>230</td>
</tr>
<tr>
<td>14. Are there other safety concerns that you think could be addressed by physical changes to the project?</td>
<td>120</td>
<td>101</td>
<td>221</td>
</tr>
<tr>
<td>15. Are there adequate play areas and equipment? Where do you think these should be located?****</td>
<td>70</td>
<td>152</td>
<td>222</td>
</tr>
<tr>
<td>16. Do you think that adding more apartment units to the property will help or hurt the project?</td>
<td>87</td>
<td>129</td>
<td>216</td>
</tr>
<tr>
<td>17. Do you like the landscaping of the property? Is your project a nice place to live/look at?</td>
<td>128</td>
<td>87</td>
<td>215</td>
</tr>
<tr>
<td>18. Is the community room adequate for community functions?</td>
<td>138</td>
<td>76</td>
<td>214</td>
</tr>
</tbody>
</table>

**1. What is the size of your unit? 1 bdrm 2 bdrm 3 bdrm 4 bdrm 5 bdrm

<table>
<thead>
<tr>
<th>Size</th>
<th>1 bdrm</th>
<th>2 bdrm</th>
<th>3 bdrm</th>
<th>4 bdrm</th>
<th>5 bdrm</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 bdrm</td>
<td>2 bdrm</td>
<td>3 bdrm</td>
<td>4 bdrm</td>
<td>5 bdrm</td>
</tr>
<tr>
<td>39</td>
<td>29</td>
<td>77</td>
<td>97</td>
<td>19</td>
<td></td>
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</tbody>
</table>

*1a. What is the size of your household? 1-18 2-23 3-22 4-26 5-38 6-30

<table>
<thead>
<tr>
<th>Size</th>
<th>1-18</th>
<th>2-23</th>
<th>3-22</th>
<th>4-26</th>
<th>5-38</th>
<th>6-30</th>
</tr>
</thead>
<tbody>
<tr>
<td>7-23</td>
<td>8-18</td>
<td>9-9</td>
<td>10-7</td>
<td>11-2</td>
<td>12-2</td>
<td></td>
</tr>
</tbody>
</table>

**2. How many bathrooms do you have? 1 bath 1.5 bath 2 bath

<table>
<thead>
<tr>
<th>Bath</th>
<th>1 bath</th>
<th>1.5 bath</th>
<th>2 bath</th>
</tr>
</thead>
<tbody>
<tr>
<td>188</td>
<td>16</td>
<td>40</td>
<td></td>
</tr>
</tbody>
</table>

**2b. Would you like more bathrooms? Where? downstairs 9

<table>
<thead>
<tr>
<th>Bathroom</th>
<th>downstairs</th>
</tr>
</thead>
<tbody>
<tr>
<td>38</td>
<td>24</td>
</tr>
</tbody>
</table>

***12. Would you like your buildings to be painted a certain color? What color would you like? white brown beige others

<table>
<thead>
<tr>
<th>Color</th>
<th>white</th>
<th>brown</th>
<th>beige</th>
<th>others</th>
</tr>
</thead>
<tbody>
<tr>
<td>38</td>
<td>24</td>
<td>23</td>
<td>37</td>
<td>38</td>
</tr>
</tbody>
</table>

****15. Are there adequate play areas and equipment? Where do you think these should be located? Please see narrative for comments.
### C. Employment Opportunities 1-9

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
<th>Total</th>
<th>% Yes</th>
<th>% No</th>
<th>Yes Total</th>
<th>No Total</th>
<th>% Yes</th>
<th>% No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Are you or any family members currently employed? (See Addendum)</td>
<td>240</td>
<td>156</td>
<td>396</td>
<td>59%</td>
<td>41%</td>
<td>213</td>
<td>113</td>
<td>58%</td>
<td>42%</td>
</tr>
<tr>
<td>1. A. Do you need more work?</td>
<td>240</td>
<td>156</td>
<td>396</td>
<td>59%</td>
<td>41%</td>
<td>213</td>
<td>113</td>
<td>58%</td>
<td>42%</td>
</tr>
<tr>
<td>1. B. More hours?</td>
<td>240</td>
<td>156</td>
<td>396</td>
<td>59%</td>
<td>41%</td>
<td>213</td>
<td>113</td>
<td>58%</td>
<td>42%</td>
</tr>
<tr>
<td>2. Have you been employed in the past? (See Addendum)</td>
<td>208</td>
<td>144</td>
<td>352</td>
<td>59%</td>
<td>41%</td>
<td>159</td>
<td>119</td>
<td>56%</td>
<td>44%</td>
</tr>
<tr>
<td>3. If you are not employed, how do you earn income?****</td>
<td>204</td>
<td>165</td>
<td>369</td>
<td>55%</td>
<td>45%</td>
<td>159</td>
<td>119</td>
<td>66%</td>
<td>34%</td>
</tr>
<tr>
<td>4. Have you had job training before? (See Addendum)</td>
<td>204</td>
<td>165</td>
<td>369</td>
<td>55%</td>
<td>45%</td>
<td>159</td>
<td>119</td>
<td>66%</td>
<td>34%</td>
</tr>
<tr>
<td>5. Would you like job training? (See Addendum)</td>
<td>204</td>
<td>165</td>
<td>369</td>
<td>55%</td>
<td>45%</td>
<td>159</td>
<td>119</td>
<td>66%</td>
<td>34%</td>
</tr>
<tr>
<td>6. How many people in your household would like to participate in a job training program?</td>
<td>204</td>
<td>165</td>
<td>369</td>
<td>55%</td>
<td>45%</td>
<td>159</td>
<td>119</td>
<td>66%</td>
<td>34%</td>
</tr>
<tr>
<td>7. Would you be willing to take any job that is available? Would you be willing to take any job training opportunity available?</td>
<td>204</td>
<td>165</td>
<td>369</td>
<td>55%</td>
<td>45%</td>
<td>159</td>
<td>119</td>
<td>66%</td>
<td>34%</td>
</tr>
<tr>
<td>8. Do you or any members of your household already have skills? (See Addendum)</td>
<td>204</td>
<td>165</td>
<td>369</td>
<td>55%</td>
<td>45%</td>
<td>159</td>
<td>119</td>
<td>66%</td>
<td>34%</td>
</tr>
<tr>
<td>9. Were you ever a member of a union? (See Addendum)</td>
<td>204</td>
<td>165</td>
<td>369</td>
<td>55%</td>
<td>45%</td>
<td>159</td>
<td>119</td>
<td>66%</td>
<td>34%</td>
</tr>
</tbody>
</table>

****3. If you are not employed, how do you earn income?

- welfare: 110
- SSI: 30
- retirement: 9
- unemployment: 1
- other: 1
- parent support: 1
- kids support: 1
# KALIHI VALLEY HOMES RENOVATION QUESTIONNAIRE

Name of Resident: _______________________________________________  Apt. No. ____

## A. Physical Conditions

<table>
<thead>
<tr>
<th>Exterior Items:</th>
<th>Maintenance Needed</th>
<th>Urgency</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(Yes/No)</td>
<td>(High, Medium, Low)</td>
<td></td>
</tr>
<tr>
<td>1. Exterior Walls and Foundation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Roofs, flashing, vents</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Gutters, downspouts</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Drives, parking lots, paving, curbs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Walks, steps, guardrails</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Fences, walls, gates</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Doors, windows, screens</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Lawns and plantings</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Sprinklers and drainage system</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Exterior lighting</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Exterior painting</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Underground gas, water, sewage</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. Security systems</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Interior Items:</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>14. Floors, carpets, tiles</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15. Stairs, walkways, community spaces</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16. Cabinets, doors, closets, hardware</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17. Painting</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18. Curtains and shades</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19. Refrigerators and ranges</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20. Garbage disposal and exhaust fans</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21. Electrical fixtures and systems</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22. Plumbing fixtures and systems</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23. Heating and air-conditioning</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>24. Hot water system, boiler room</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25. Exit Doors/Jams</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Miscellaneous:</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>26. Benches, play area and equipment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>27. Project signs and office</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28. Exterminating</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>29. Fire extinguishers</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Also translated into Lao, Samoan, Tongan and Vietnamese
<table>
<thead>
<tr>
<th>B. RENOVATION</th>
<th>Yes/No</th>
<th>Comments - What changes would you like?</th>
<th>Priority (1st, 2nd, 3rd)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Changes:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. What is the size of your unit?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 bedroom</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 bedrooms</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 bedrooms</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. What is the size of your household?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Is your unit large enough for your household size?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. a. How many bathrooms do you have?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Would you like more bathrooms?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Where?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Does your kitchen function adequately?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Are your counter space, cabinet space, sink space, closet space, and storage space adequate?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Do your appliances work properly?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Does your apartment have enough ventilation?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Do your garbage disposal and exhaust fans work adequately?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Are your electrical outlets placed in reasonable places, safe from the reach of small children?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Do you have adequate water pressure for your showers and/or baths?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B. RENOVATION</td>
<td>Yes/No</td>
<td>Comments - What changes would you like?</td>
<td>Priority (1st, 2nd, 3rd)</td>
</tr>
<tr>
<td>---------------</td>
<td>-------</td>
<td>----------------------------------------</td>
<td>------------------------</td>
</tr>
<tr>
<td>10. Is there adequate parking?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Do you feel safe in your building? On your block?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Would you like your buildings to be painted a certain color? What color would you like?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. Is there adequate exterior lighting? Would you like exterior lighting?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. Are there other safety concerns that you think could be addressed by physical changes to the project (e.g. a security system)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15. Are there adequate play areas and equipment? Where do you think these should be located?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16. Do you think that adding more apartment units to the property will help or hurt the project?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17. Do you like the landscaping of the property? Is your project a nice place to live/look at?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18. Is the community room adequate for community functions?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C. Employment Opportunities</td>
<td>Yes/No</td>
<td>Comments</td>
<td></td>
</tr>
<tr>
<td>-----------------------------------------------------------------</td>
<td>--------</td>
<td>----------</td>
<td></td>
</tr>
<tr>
<td>1. Are you or any family members currently employed? If so, where do you work and what do you do?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Do you need more work?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. More hours?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Have you been employed in the past?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>If so, where did you work and what did you do?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. If you are not now employed, how do you earn income?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Have you had job training before? If so, what type of training have you had?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Would you like job training? If so, in what type of industry would you like to work and what would you like to do?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. How many people in your household would like to participate in a job training program?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Employment Opportunities</td>
<td>Yes/No</td>
<td>Comments</td>
</tr>
<tr>
<td>---</td>
<td>--------------------------</td>
<td>--------</td>
<td>----------</td>
</tr>
<tr>
<td>7.</td>
<td>Would you be willing to take any job that is available?</td>
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<td></td>
<td>Would you be willing to take any job training opportunity available?</td>
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<tr>
<td>8.</td>
<td>Do you or any members of your household already have skills such as:</td>
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<tr>
<td></td>
<td>Carpentry</td>
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<tr>
<td></td>
<td>Electrical</td>
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<tr>
<td></td>
<td>Masonry</td>
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<tr>
<td></td>
<td>Painting</td>
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<tr>
<td></td>
<td>Plumbing</td>
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<tr>
<td></td>
<td>or any other skill related to construction/renovation work?</td>
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<td>9.</td>
<td>Were you ever a member of a union?</td>
<td></td>
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<tr>
<td></td>
<td>If so, what union?</td>
<td></td>
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</tr>
</tbody>
</table>