(FINAL)
ENVIRONMENTAL ASSESSMENT for the

WEINBERG VILLAGES-HALEIWA
Tax Map Key: 6-2-6:6 & 7 (pors.)
Island of Oahu, Hawaii

SEPTEMBER 1991

PREPARED FOR:
Department of Human Services
State of Hawaii

RMTC
R. M. Towill Corporation
420 Waikele Pkwy., Suite 411
Honolulu, Hawaii 96817-9441
(808) 842-1123 * Fax: (808) 844-1257
ENVIRONMENTAL ASSESSMENT
FOR
WEINBERG VILLAGES HALEIWA PROJECT
ISLAND OF OAHU, HAWAII
TAX MAP KEY NO: 6-2-66 & 7 (por.)

This document was prepared pursuant to Chapter 343, HRS

PROPOSING AGENCY:
Department of Human Services
State of Hawaii
Liliuokalani Building
1390 Miller Street
Honolulu, Hawaii 96813

SEPTEMBER 1991

RESPONSIBLE OFFICIAL:

Winona Rubin, Director

Date 9/25/91
September 25, 1991

Mr. Brian Choy
Director
State Office of Environmental Quality Control
220 South King Street, 4th Floor
Honolulu, Hawaii 96813

Dear Mr. Choy:

Negative Declaration for:
Weinberg Villages Haleiwa
TMK Nos.: 6-2-6:6 & 7 Portions

We are hereby submitting four (4) copies of the Shoreline Management Area (SMA) Use Permit application package for the Weinberg Villages Haleiwa TMK No. 6-2-6:6 & 7 Portions, located on the Island of Oahu. The project proposal is to construct transitional housing units to accommodate 55 homeless families at the Haleiwa location for a 5-year period.

Upon our review and analysis of the conditions and impacts presented in the attached Environmental Assessment (presented herein as a supplement to the SMA permit package), we have concluded that the proposed project will not have a significant cumulative impact on the environment. Therefore, we are issuing a Negative Declaration for the subject project.

We are requesting that this Negative Declaration be published in the OEQC Bulletin. Please do not hesitate to call Bob Stauffer at 586-4993 or me should you have any questions regarding this matter. Thank you in advance for your attention to this request.

Sincerely,

[Signature]
WINONA RUBIN
DIRECTOR

Enclosure
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SUMMARY INFORMATION</strong></td>
<td>1</td>
</tr>
<tr>
<td><strong>SECTION 1 - BACKGROUND AND PURPOSE</strong></td>
<td>2</td>
</tr>
<tr>
<td>1.1 Background</td>
<td>2</td>
</tr>
<tr>
<td>1.2 Purpose</td>
<td>4</td>
</tr>
<tr>
<td><strong>SECTION 2 - DEVELOPMENT PROPOSAL</strong></td>
<td>7</td>
</tr>
<tr>
<td>2.1 Location</td>
<td>7</td>
</tr>
<tr>
<td>2.2 Project Description</td>
<td>7</td>
</tr>
<tr>
<td>2.3 Development Schedule</td>
<td>10</td>
</tr>
<tr>
<td>2.4 Estimated Development Costs</td>
<td>10</td>
</tr>
<tr>
<td>2.5 Disposition of the Village After 5-Year Transition Period</td>
<td>10</td>
</tr>
<tr>
<td><strong>SECTION 3 - ENVIRONMENTAL CONDITIONS AND PROJECT IMPACTS</strong></td>
<td>12</td>
</tr>
<tr>
<td>3.1 Existing and Surrounding Uses</td>
<td>12</td>
</tr>
<tr>
<td>3.2 Physiography</td>
<td>13</td>
</tr>
<tr>
<td>3.3 Climate</td>
<td>13</td>
</tr>
<tr>
<td>3.4 Geology and Soils</td>
<td>13</td>
</tr>
<tr>
<td>3.5 Surface Water and Drainage</td>
<td>14</td>
</tr>
<tr>
<td>3.6 Natural Hazards</td>
<td>14</td>
</tr>
<tr>
<td>3.7 Hydrology</td>
<td>14</td>
</tr>
<tr>
<td>3.8 Visual Character</td>
<td>15</td>
</tr>
<tr>
<td>3.9 Air Quality</td>
<td>15</td>
</tr>
<tr>
<td>3.10 Noise Impact</td>
<td>16</td>
</tr>
<tr>
<td>3.11 Flora and Fauna</td>
<td>16</td>
</tr>
<tr>
<td>3.12 Historic, Cultural and Archaeological Resources</td>
<td>16</td>
</tr>
<tr>
<td><strong>SECTION 4 - PUBLIC FACILITIES AND SERVICES AND PROJECT IMPACTS</strong></td>
<td>17</td>
</tr>
<tr>
<td>4.1 Water System</td>
<td>17</td>
</tr>
<tr>
<td>4.2 Drainage System</td>
<td>17</td>
</tr>
<tr>
<td>4.3 Wastewater System</td>
<td>18</td>
</tr>
<tr>
<td>4.4 Circulation</td>
<td>18</td>
</tr>
<tr>
<td>4.5 Solid Waste</td>
<td>18</td>
</tr>
<tr>
<td>4.6 Power and Communication</td>
<td>18</td>
</tr>
<tr>
<td>4.7 Police and Fire Protection</td>
<td>18</td>
</tr>
<tr>
<td>4.8 Schools and Hospitals</td>
<td>19</td>
</tr>
</tbody>
</table>
CORRECTION

THE PRECEDING DOCUMENT(S) HAS BEEN REPHOTOGRAPHED TO ASSURE LEGIBILITY
SEE FRAME(S) IMMEDIATELY FOLLOWING
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>SECTION 5 - SOCIO-ECONOMIC CONDITIONS AND PROJECT IMPACTS</td>
<td></td>
</tr>
<tr>
<td>5.1 Social Considerations</td>
<td>20</td>
</tr>
<tr>
<td>5.2 Economic Considerations</td>
<td>20</td>
</tr>
<tr>
<td>SECTION 6 - LAND USE POLICIES</td>
<td>21</td>
</tr>
<tr>
<td>6.1 State Land Use Policies</td>
<td>21</td>
</tr>
<tr>
<td>6.2 County Plans and Programs</td>
<td>21</td>
</tr>
<tr>
<td>6.3 Development Plan</td>
<td>22</td>
</tr>
<tr>
<td>6.4 Zoning</td>
<td>22</td>
</tr>
<tr>
<td>6.5 Special Management Area</td>
<td>22</td>
</tr>
<tr>
<td>6.6 Subdivision Requirements</td>
<td>22</td>
</tr>
<tr>
<td>6.7 Land Use and Development Standards</td>
<td>23</td>
</tr>
<tr>
<td>6.8 Permitting and Development Standards</td>
<td>23</td>
</tr>
<tr>
<td>6.9 Summary of Required Land Use Permits and Approvals</td>
<td>23</td>
</tr>
<tr>
<td>SECTION 7 - ALTERNATIVES</td>
<td>24</td>
</tr>
<tr>
<td>7.1 No Action Alternatives</td>
<td>24</td>
</tr>
<tr>
<td>7.2 Alternative Sites</td>
<td>24</td>
</tr>
<tr>
<td>7.3 Alternative Concepts</td>
<td>24</td>
</tr>
<tr>
<td>7.4 Alternative Building Designs</td>
<td>24</td>
</tr>
<tr>
<td>SECTION 8 - DETERMINATION</td>
<td>26</td>
</tr>
<tr>
<td>8.1 Determination</td>
<td>26</td>
</tr>
<tr>
<td>8.2 Findings and Reasons Supporting Determination</td>
<td>26</td>
</tr>
</tbody>
</table>

APPENDIX A - Honolulu City Council Resolution 91-172
APPENDIX B - Honolulu City Council Resolution 91-206
APPENDIX B - Outline Specifications
| Figure No. 2-1 | Location Map          |
| Figure No. 2-2 | Vicinity Map          |
| Figure No. 2-3 | Site Plan             |
| Figure No. 2-4 | Cluster Plan          |
| Figure No. 2-5 | Family Unit           |
| Figure No. 2-6 | Couples Unit          |
| Figure No. 2-7 | Large Family Unit     |
| Figure No. 2-8 | Admin./Child Care/Study Hall |
| Figure No. 2-9 | Laundry               |
| Figure No. 2-10| Exterior Elevations   |
| Figure No. 2-11| Building Sections     |
| Figure No. 6-1 | Land Use Designations |
SUMMARY INFORMATION

Project: Weinberg Villages Haleiwa: Homeless Families Kokua Program, New Villages Project

Proposing Agencies: State of Hawaii:
  - Department of Human Services
  - Department of Land and Natural Resources
City and County of Honolulu:
  - Department of Housing and Community Development
  - Department of Land Utilization
  - Department of Parks and Recreation

Accepting Authority: Department of Human Services
  State of Hawaii

Tax Map Key No. and Area: 6-2-6: Portions of 6 & 7
  Parcel 6: 4.1 acres
  Parcel 7: 40.8 acres

Owner(s):
  Parcel 6: Castle & Cooke, Inc.
  Parcel 7: B. P. Bishop Estate

Lessees:
  Waialua Sugar Company, Inc. (Parcel 7) until December 31, 2000

Land Use Designations:
  SLUC: Agriculture
  City/County DP: Agriculture
  Zoning: AG-1 Restricted Agricultural District
  Special District: Haleiwa Special District

Existing Use(s):
  Existing Use(s): Sugar cane fields
SECTION 1
BACKGROUND AND PURPOSE

1.1 Background
The State Department of Human Services (DHS) proposes to develop the "Weinberg Villages Haleiwa" project with the assistance of the City and County of Honolulu and the Weinberg Foundation. The project is a Government Assistance Program under Chapter 201E-210, HRS, and therefore eligible for certain governmental exemptions.

The project is targeted to meet the needs of homeless families in Hawaii by providing transitional shelter units. According to the State's contracted survey on homelessness in Hawaii ("Hawaii's Homeless" by SMS Research, June 1990), there were approximately 8,000 homeless people of whom 3,000 were children of approximately 1,200 families. Private agencies report that the actual figures may be higher for families with children.

The most successful local programs addressing this social emergency are the transitional shelters developed by the City and County of Honolulu, operated by non-profit agencies with partial operational support from the State. These programs, however, are only providing help to fewer than 200 homeless families.

Governor John Waihee and Mayor Frank F. Fasi, in December 1990 therefore, initiated this project to develop transitional units for another 500 homeless families. The New Villages Project is a part of the Homeless Families Kokua Program. The Program is an integrated approach to addressing the problem of homelessness. The New Villages Project began with an idea of building a single site for all the units. Discussions with experienced non-profit agencies in January and February 1991 resulted in a modified plan of "villages" approximately 55 families, spread around the island, with no site having more than two villages.
In early 1991, the State, with City assistance, seriously considered 55 sites and informally reviewed perhaps another 20. DHS released the list of the 55 sites to the media in March 1991. In selecting these sites, DHS has followed technical criteria in line with the policy of equality to ensure site locations in a mix of neighborhoods, rural and urban, with social economic mix of affluent and moderate income communities. The selection mechanism was a process of elimination. Since then seven (7) sites have been selected.

The criteria used for selecting sites are as follows:

1. The site must have a minimum of five acres of land (later modified to two acres);
2. The land must not be currently developed;
3. The land must be owned by the State, City, Federal government, or by a private owner willing to lease or otherwise convey it to the State for a nominal sum;
4. The land must be available for about five years for use as a village;
5. The land must be close to existing infrastructure (water, wastewater, electricity, roads);
6. The land must be generally flat and suitable for buildings; and
7. The land must not present a threat to public health or safety.

On August 1, 1991, the Honolulu City Council passed the Resolution No. 91-171 to grant various exemptions from certain requirements for villages at Fort Barrette, Waimanalo, and Waianae (see the attached Resolution, Appendix A). Subsequent to the passage of the Resolution, the Manoa site has been eliminated from the future village development. DHS has submitted three additional sites to the City Council as alternate sites to replace the original Hauula, Hawaii Kai and Haleiwa sites and obtain the similar exemptions from certain requirements. The Council granted the exemptions for these three alternate sites on September 3, 1991 (see Resolution No. 91-206, Appendix B).
The following is a list of villages:
- Fort Barrette (TMK: 9-1-16:2,21,22 & 24): City land.
- Koko Head Park (TMK: 3-9-12: portion of 1): City land.
- Malaekahana (TMK: 5-6-1: portions of 47 and 64): State land.

Each "village" will house approximately 55 homeless families in transitional housing units for not more than five (5) years. Management of the village, once developed by DHS, will be contracted to qualified non-profit corporation(s) by DHS. A subsidy to the non-profit managers for the operation of the sites will be paid by DHS.

1.2 Purpose
This environmental assessment is prepared in accordance with Chapter 343, Hawaii Revised Statutes (HRS) and the rules and regulations of the Office of Environmental Quality Control (OEQC).

The purpose of the environmental assessment is to provide information to public officials and members of the community on the nature of the subject action; to assess existing environmental conditions of the properties and surrounding areas; to evaluate potential impacts that may result from development of the project and to propose mitigation measures for those impacts; and to consider alternatives to the proposed action.

The Weinberg Villages Haleiwa will be developed by DHS with the assistance of the City and County of Honolulu. The project is a Government Assistance Program under §201E-210, HRS, and therefore eligible for City assistance and certain City Council exemptions.

To the extent that the development of the project is non-conforming to various regulations, including Chapter 343, HRS, DHS seeks exemption of the project therefore under the
provisions of §201E-210, HRS, which requires, among other things, the prior approval of the project's preliminary plans and specifications by the Council. The City and County of Honolulu enjoys the powers of 201E-210, HRS, under the provisions of §46-15.1, HRS.

To the degree that Chapter 343, HRS, requires permits or other actions that would prevent the development of this project, DHS requested exemption of such permits or actions. Pursuant to §§46-15.1 and 201E-210, HRS, therefore, DHS considers the project to be exempted from applicable portions of Chapter 343, HRS, contingent on City Council approval.

Further, under §11-200-8(f), Hawaii Administrative Rules (HAR), the normal requirements for an Environmental Assessment and such other regulations under Chapter 343, HRS, for any project may be waived if the Governor declares an emergency.

It is therefore the position of DHS that Chapter 343, HRS, does not apply to this project under exemptions from §11-200-8(f), HAR, and §§46-15.1 and 201E-210, HRS, and that this Environmental Assessment has been voluntarily prepared for the purposes above. Also, that preparation of this EA and its subsequent submission to OEQC, does not suggest an acknowledgement that this project is bound by Chapter 343, HRS.

Finally, it is the position of DHS that if exemption of this project from Chapter 343, HRS, is held by a court of competent jurisdiction to be invalid, then this Environmental Assessment and its subsequent filings shall be construed thereafter by DHS to be done in accordance with Chapter 343, HRS.

On September 5, 1991 the Honolulu City Council authorized certain exemptions for the Haleiwa Villages Project (see Appendix B, Resolution No. 91-206). Specific to the Haleiwa site, the City Council authorized it to be exempt from the State Land Use boundary amendment process to allow the project to be constructed on lands classified Agricultural on the State Land Use Map. The City Council further authorized the Haleiwa site to be
exempt from Chapter 32 of the Revised Ordinances of Honolulu (ROH), as amended, Development Plans, to allow the project to be constructed on lands designated Agricultural on the Development Plan maps. The Council also authorized the site to be exempted from Sections 21A-5.10-1, 21A-5.20-5, 21A-5.40, 21A-7.90, and Table 21-G of the Land Use Ordinance in the ROH, Uses and Development Standards, to waive uses and development standards for the Weinberg Villages.
SECTION 2
DEVELOPMENT PROPOSAL

2.1 Location
The Weinberg Villages Haleiwa is located on Tax Map Key number 6-2-6: Portions of 6 and 7.

The village site is located in the northwest area of the Island of Oahu at the southern edge of Haleiwa Town, approximately .75 mile mauka of Haleiwa Beach Park. Figure 2-1, shows the general location of this proposed Homeless Villages site. Figure 2-2, details the location of the Haleiwa facility and its immediate vicinity. The proposed site abuts the Waialua Community Center. Most the land to the east of the project site is still under active sugar cane cultivation. Forming the eastern boundary, however, is the future Haleiwa Bypass Alignment. Opaeka Stream runs along the southern boundary of the site. Kamehameha Highway forms the site’s western boundary.

2.2 Project Description
The village will provide transitional housing units for not more than 55 families; consist of 35 family units, and 20 single couple units, 5 administration/child care units. The units will be arranged in 5 "clusters" (Figure 2-3). Each "cluster" will consist of living units looking into a courtyard made up of a tot lot, bar-b-que grills and picnic benches. Each cluster will consist of living units and one administration/child and infant care/study hall building. Three of the five clusters will have a laundry building. See Figure 2-4 for a general "cluster" arrangement plan.

2.2.1 Building Plans
Each cluster will include a mix of three types of living units: family, single couple, and large family. See Figures 2-5, 2-6 and 2-7.
FIGURE 2-1
LOCATION MAP
HOMELESS VILLAGES PROJECT
Weinberg Villages Haleiwa
State of Hawaii

Kahuku Point
LAIE
WAHIAWA
KAENA POINT
PAUAAI
PEARL CITY
KAHEELE
MILILANI
WAIPAHU
AIEA
EWA
HONOLULU
MAKAPUU POINT
KAULUA
FIGURE 2-3
HALEIWA FACILITY - SITE PLAN
TEMPORARY HOUSING FACILITIES FOR THE HOMELESS
DEPARTMENT OF HUMAN SERVICES
STATE OF HAWAII

SEPTMBER 91
11 FAMILIES
14,400 S.F. = 0.33 ACRE

FIGURE 2-4
CLUSTER PLAN
TEMPORARY HOUSING FACILITIES FOR THE HOMELESS
FIGURE 2-7
LARGE FAMILY UNIT
TEMPORARY HOUSING FACILITIES FOR THE HOMELESS
A. Family Unit
A "family unit" will consist of two rooms of 96 square feet each (8 feet by 12 feet) and a small bathroom of 24 square feet (8 feet by 3 feet). This family unit will have two exterior doors and a central partition with interior door. The unit will have a small kitchen consisting of a sink and counter with a small refrigerator, microwave oven, and rice cooker. This unit is designed for a family of three or four members. See Figure 2-5.

B. Couples Unit
The second type of living unit in a cluster is the "couples unit." One building will consist of two living units. Each living unit consists of one room of 96 square feet (8 feet by 12 feet) with its own small bathroom of 24 square feet (8 feet by 3 feet). Each unit has its own exterior door with a central partition between the two living units for sound isolation. Each living unit also has its own small kitchen as above, consisting of a sink and counter with a small refrigerator, microwave oven, and rice cooker. Each of these small living units is designed for a family of two members. See Figure 2-6.

C. Large Family Unit
The final type of living unit in a cluster is the "large family unit." This consists of one large room of 192 square feet (16 feet by 12 feet) and two small bathrooms of 24 square feet each (8 feet by 3 feet each). This unit will have two exterior doors. The unit will also have a small kitchen as described above, with a sink and counter with a small refrigerator, microwave oven, and rice cooker. This unit is designed for families of up to five members with infants. See Figure 2-7.

Families with more members will be given more than one living unit within the cluster.
D. **Administration/Child Care Unit**

Each cluster will also include one building used in about half the clusters for administration purposes and in the other half as an infant/child care and study hall building. The administration building(s) will be used for office space for the non-profit management corporation running the village, including the corporation's social services personnel. The infant/child care buildings will double as a study hall for the school age children in the evenings.

Each administration or child and infant care/study hall building will use the same design which consists of one room (which may be partitioned) of 192 square feet (16 feet by 12 feet) and two small bathrooms of 24 square feet each (8 feet by 3 feet each) with a sink and counter area. This unit will have two exterior doors. See Figure 2-8.

E. **Laundry Unit**

Three clusters will also include a laundry building. This consists of one room of 96 square feet (8 feet by 12 feet). It includes approximately three washers, three dryers, and a counter area. See Figure 2-9.

F. **Building Specifications**

All units will use the same basic modular construction of 8 feet by 12 feet, with bathrooms being an additional module of 8 feet by 3 feet. As such, the specifications for all structures will be based on these modules and will be the same. Figures 2-10 and 2-11 give the specifications of the units through an exterior elevation and a section drawing.

An outline specification, listing the types of material to be used in the project is attached as Appendix C.
FIGURE 2-9
LAUNDRY

TEMPORARY HOUSING FACILITIES FOR THE HOMELESS
COMPOSITION SHINGLE ROOFING
W/5/8"DOUGLAS FIR PLYWOOD
SHEATHING AND 2X4 RAFTERS
AT 24"O.C.

RIDGE CAP

2X6 RIDGE

2X4 JOINT

2X4 PLATE

3/4"DOUGLAS FIR PLYWOOD

3/4"T&G PLYWOOD
2X6 AT 24"O.C

FIN. GRADE

CONCRETE PYRAMID FOOTING

FIGURE 2-11
SECTION

TEMPORARY HOUSING FACILITIES FOR THE HOMELESS
2.2.2 Operation and Management

Management of the Weinberg Villages Haleiwa, once developed by DHS, will be contracted to qualified non-profit corporations by DHS. A subsidy to the non-profit managers for the operation of the sites will be paid by DHS.

The non-profit agencies selected by DHS will be experienced in administering these programs. The Weinberg Villages Haleiwa will be operated as transitional facilities, with case management social services to address the individual needs of the tenant families.

The maximum length of stay in the village is 18 months. Most families in other similar programs, according to a social services provider, move to more permanent housing units or alternate living arrangements with their improved family situations and having secured better jobs. The social service providers help the families find more suitable housing, but are not themselves responsible for finding units.

Experienced counselors feel that it will be difficult for families to find more permanent housing in Haleiwa because this community does not have enough housing to begin with.

2.3 Development Schedule

Upon receipt of necessary permits and development approvals in the third quarter of 1991, site preparation and construction will begin, with occupancy expected in the last quarter of 1991 or the first quarter of 1992.

2.4 Estimated Development Cost

Exclusive of off-site infrastructure improvements, the estimated development cost for a village of 55 families is $1.6 million.

2.5 Disposition of the Village After 5-Year Transition Period

The Haleiwa Village site is a portion of two parcels; parcel 6, owned by Castle & Cooke, Inc. has a total area of 4.1 acres, and parcel 7, owned by B. P. Bishop Estate, has a total
area of 40.8 acres. At the end of the 5-year period, the property will be returned to Waialua Sugar Company, Inc. who holds the lease on this parcel until December 31, 2000.
SECTION 3
ENVIRONMENTAL CONDITIONS AND PROJECT IMPACTS

3.1 Existing and Surrounding Uses
The Haleiwa project site is owned by Castle & Cooke, Inc. (Parcel 6) and B. P. Bishop Estate (Parcel 7), and is located at the southern edge of Haleiwa Town in Paalaa Kai. The site is bounded by Kamehameha Highway to the west, the future Haleiwa Bypass Alignment to the east, and adjoins the parking area of the Waialua Community Center. The eastern backdrop of the project site consists of lands under cultivation for sugar cane. The site has been partially cleared and is no longer in sugar cane production. The rest of the site is covered with weeds. Haleiwa Town and its commercial activities are located immediately north and makai of the project site, with the Haleiwa Town Market (a small shopping complex) located within a five-minute walk away.

The project site’s southern boundary is demarcated by weeds, banana and coconut fruit trees, and plumeria flower bushes up to Kamehameha Highway.

Existing overgrowth along the perimeter will be retained as buffers. Fencing will be used for the project, and landscaping will be provided internally for the project and also to help screen views onto the site from surrounding properties. The cabin structures will generally "fit in" with the rural setting of the original plantation Haleiwa and Waialua communities, as the lot densities of neighboring residential subdivisions (referred to as "camps" on the plantations) tend to be higher (than the average 5,000 square foot lots found in other standard subdivisions on Oahu).

No adverse impacts on the existing land use are anticipated in the long term, since the proposed projects will utilize the site for no more than five years after completion of development. Upon closure of the project site for its village use, the structures will be moved to other locations, thereby releasing the land for use by its owners.
3.2 Physiography
The project site is situated on the north shore of Oahu on the Waialua Plain. This area of the island geologically consists of alluvium, dune sand, colluvium, mudflow deposits, and lagoonal deposits. The site is flat with a change in elevation from abutting properties of 5 to 10 feet.

The proposed project will not significantly alter the physiography of the land since the sites will be minimally graded and the structures will be single story buildings on concrete pyramid footings. The proposed project will involve trenching for utilities connections, but all finished grades will be close to if not the same as the original grades.

3.3 Climate
The climate of the Haleiwa area is sub-tropical. The project site generally receives abundant sunshine during most of the year. The northeasterly tradewinds are the prevailing winds during most of the year. The average annual rainfall for Oahu is approximately 24 inches while the average annual rainfall for Haleiwa is nearly 30 inches. The average daily temperature ranges between the high 70's to the high 80's. The project is not expected to have any effect on the existing climatic conditions.

3.4 Geology and Soils
The geology of the proposed project site consists of alluvium, mudflow deposits and lagoonal deposits. Soils of this area are generally described as Molisols, which are well-drained, relatively young soils that develop on coral, lava, or alluvium. They occur in moderately dry areas of the islands and are generally rich in plant nutrients. No adverse impact on geology and soils is anticipated because no new fill material will be used.

3.5 Surface Water and Drainage
Surface flows are currently handled as sheet flows into the Opaeka'a Stream located near the eastern and southern boundaries of the project site. The site will be graded to accommodate surface sheet flows to existing drainage facilities.
3.6  **Natural Hazards**

**Flood:** The Haleiwa site is located in Flood Zone X. Flood Zone "X" is defined as an area of moderate or minimal hazard from the principal source of flood in the area. However, buildings in this zone could be flooded by severe, concentrated rainfall coupled with inadequate local drainage systems. Development of this site will be possible with the proposed drainage system improvements. An existing drainage channel (Opaeula Stream) that runs near the eastern and southern boundary of the property will be cleaned and properly maintained to minimize potential flooding of the project site.

**Tsunami:** The Haleiwa property is located at the eastern edge of an inundation area as identified on Map 13: Waialua Bay to Mokuleia (Civil Defense Tsunami Evacuation Maps, 1991). While the facility will be vulnerable during the 5-year occupancy period, the residential structures will be located off the ground on concrete pyramid footings, thus elevating the floors approximately 24 inches above grades.

**Earthquake:** All of the island of Oahu is rated as seismic Zone 2A, according to standards established in the 1988 Uniform Building Code (UBC). There are four zones (1 through 4) in this range, with Zone 1 as the rating given to areas least prone and Zone 4 as the most prone to earthquake hazards.

The proposed project is not expected to be susceptible to earthquakes or tsunamis.

3.7  **Hydrology**

The proposed project is not expected to adversely impact the underlying groundwater sources of Oahu since no drilling for wells is proposed.

3.8  **Visual Character**

At present the proposed project site is vacant except for the existence of remnant sugar cane plants and weeds. The proposed project will have no adverse impacts on existing views in this neighborhood as the proposed cabin-like structures will be in character with the rural
Haleiwa setting. The village will be set back 240 feet from Kamehameha Highway, and will be partially screened from the highway by existing and new trees along the makai boundary of the site.

Visual impacts will be temporary in nature as the cabins will be relocated to other sites once the five year project period ends.

3.9 Air Quality
Temporary adverse impacts on air quality will occur during the utility system improvements construction period. Heavy construction equipment that will be used during the construction phase will emit exhaust and airborne particulates. The construction work will also produce dust. These impacts will be reduced through the use of approved mitigative measures discussed in Section 8. No adverse impacts on ambient air quality are anticipated for the occupancy phase.

3.10 Noise Impacts
Temporary adverse noise impacts on adjacent agricultural and commercial properties will also occur during the construction of the proposed project. Noise impacts created by construction equipment such as backhoes and dump trucks will be reduced through the use of approved mitigative measures discussed in Section 8. Further, construction activities will be limited to daytime hours so as to avoid inconveniences to residents along Kamehameha Highway.

Traffic-induced noise will result from the project. There may be as many as 60 vehicles (the number of parking spaces available) entering and leaving the project site on any given day. The single access off Kamehameha Highway for the project site will be located to prevent excessive queuing on major roadways in proximity of the site. Strictly enforced curfews for the residents in the villages will also keep traffic-generated noise impacts to a minimum.
3.11 Flora and Fauna

According to the Forestry and Wildlife staffs of the State Department of Land and Natural Resources, exotic vegetation is expected without rare, Hawaiian plants. The Haleiwa/Waialua area is rich in wetlands that provide habitat for endangered Hawaiian waterbirds. While the site may not be on or near the wetlands, the impacts of a village and occupants may. The development is proposed as a temporary use that will be removed in 5 years, thus allowing for future use of the site for other intended uses thereby not foreclosing any planning options.

Site development will be coordinated with the State Department of Land and Natural Resources and if any endangered resources are found arrangements will be made to notify that department to do whatever follow up is necessary. However, given the proposed preservation of existing vegetation on site for screening and low cost landscaping, it is not anticipated that there will be any significant impact on botanical or wildlife resources. Further, because this area has little rainfall during the year, fire prevention will be emphasized during the five-year duration of the project.

3.12 Historic, Cultural and Archaeological Resources

According to the State Historic Preservation Division of the State Department of Land and Natural Resources, the Haleiwa site has been used for sugarcane cultivation for many years, so it is unlikely that any historic sites remain. There are no known historic sites at the parcels.

Site development will be coordinated with the State DLNR and if any archaeological sites are found arrangements will be made to notify the department to carry out any necessary follow up activities. However, given the temporary nature of the project and the minimal amount of grading proposed, it is not anticipated that there will be any significant impact on historic, cultural or archaeological resources.
SECTION 4
PUBLIC FACILITIES AND SERVICES AND PROJECT IMPACTS

Water and drainage requirements will, as a whole, entail connections to existing utility systems.

4.1 Water System
It is estimated that water demand for 55 families is 39,000 gallons per day. The Board of Water Supply has determined that the existing off-site water system is presently adequate to accommodate the proposed project.

Honolulu City Council has exempted the Weinberg Villages Haleiwa from the BWS Water System Facilities Charges under the conditions set forth in Resolution No. 91-206.

The BWS service to the site, however, is premised as follows:

1. If a 3-inch or larger meter is required, the construction drawings showing the installation of the meter should be submitted for BWS review and approval.
2. The on-site fire protection requirements should be coordinated with the Fire Prevention Bureau of the Honolulu Fire Department.
3. All piping after the master meter should be kept private and installed by the State agency developing the homeless shelter site.
4. Landscaping should utilize xeriscape principles to reduce irrigation requirements.

4.2 Drainage System
Surface flows are currently handled through sheetflows directed to existing surrounding areas. A swale will be cut for the project to direct flows into the adjacent areas.

-17-
4.3 **Wastewater System**

Municipal sewer facilities are not available in the area. Approval must be obtained from the State Department of Health for the sanitary waste disposal systems at this village site.

4.4 **Circulation**

Access into and out of the proposed site will be via a single 22-foot wide right-of-way that will connect with Kamehameha Highway. No upgrades or street improvements are proposed for Kamehameha Highway. This 22-foot wide access road will be improved using asphaltic concrete or bitumen and gravel seal, to ameliorate any air quality health concerns (dust particulates). Traffic on the streets surrounding the site will be slightly disrupted during construction activities. A traffic control plan shall be prepared and approved by the City and County to minimize any traffic impacts. The additional 60 vehicles on surrounding roadways during the 5-year project period are not expected to significantly affect the area’s traffic circulation.

Landscaping will be placed in locations where it will not obstruct vehicular sight lines.

4.5 **Solid Waste**

Refuse collection service will be provided by the City and County of Honolulu. Three cubic yard containers at each site will be furnished by the user or non-profit operator.

4.6 **Power and Communication**

Electricity will be provided to the site through existing Hawaiian Electric Company service facilities. Telephone service to the administrative buildings will be established and pay phones will be installed in the laundry buildings for tenants’ use.

4.7 **Police and Fire Protection**

Village residents will be trained and hired to provide security services. The City and County Police Department will be asked to assist in establishing a Neighborhood Security Watch Program. There will be a resident manager for each village. Additional security personnel
will be hired as needed. Adequate on-site parking, lighting in the parking lot, a single entry point and other design features will enhance security.

Adequate fire protection for the project will be furnished by way of development of water facilities including hydrants and fire hoses.

4.8 Schools and Hospitals
Nearby public schools and health care facilities will be available to the residents of the transitional shelter sites. Nearby public schools are Haleiwa Elementary (535 students/639 capacity), and Waialua High and Intermediate (1,038 students/1,016 capacity). While the elementary school will have the capacity to accommodate the younger students, arrangements will call for coordination between DHS and Department of Education to accommodate the students who will be attending grades 7 to 12 as the current enrollment indicates an overcapacity by 22 students.

Health care services are available to residents of Haleiwa at Wahiawa General Hospital whose service area covers central, leeward Oahu and the north shore.
SECTION 5
SOCIO-ECONOMIC CONDITIONS AND PROJECT IMPACTS

5.1 Social Considerations
"Hawaii's Homeless," a study prepared by SMS Research (July 1990), estimates that between 7,023 and 8,369 individuals are homeless in Hawaii on any given day. In any given week, the estimate ranges from between 7,874 and 9,417. While these estimates may be questioned, the data is "the most definitive data available at this time," and is acknowledged as a useful first step in addressing the problems of the homeless in Hawaii.

Data indicate that only 13 to 15 percent of homeless individuals and families are sheltered on any given day. The vast majority of the homeless are living in parks, on beaches, in vans and cars, under viaducts, and in caves.

The overall proposed project will provide 500 transitional housing units, with Haleiwa providing 55, to help mitigate the shelter problems of the homeless in Hawaii. The transitional facility will provide a wide range of support services to assist the families in their movement toward permanent and stable living situations.

5.2 Economic Considerations
The development cost for the proposed project is estimated at $8 million, excluding cost of off-site infrastructure improvements. While much of the labor and materials will be donated, it will be a minor source of employment during certain phases of the construction period. It will also be a source of income for those that supply materials for the project construction.
SECTION 6
LAND USE POLICIES

6.1 State Land Use Policies
The Haleiwa site is designated Agriculture on the State Land Use Map (see Figure 6-1). While the proposed residential use on Agriculture-designated lands may not be consistent with the State Land Use law, the area required on each parcel is less than 15 acres. Permission to utilize these Agriculture-designated parcels was approved by the City Council in Resolution 91-206 (see Appendix B).

6.2 County Plans and Programs
The City and County of Honolulu has land use control jurisdiction over the sites. The following are land use policies that affect the project sites.

General Plan
The General Plan Objectives and Policies of the City and County of Honolulu that apply are as follows:

HOUSING
Objectives
To provide decent housing for all the people of Oahu at prices they can afford. To provide... a choice of living environments which are reasonably close to employment, recreation, and commercial centers and which are adequately served by public utilities.

Policies
Develop programs and controls which will provide decent homes at the least possible cost. Encourage innovative residential development which will result in lower costs, added convenience and privacy, and the more efficient use of streets and utilities.

-21-
LEGEND
A = State Land Use Commission
Agriculture = Development Plan
AG-1 = County Zoning

FIGURE 6-1
Land Use Designations
HOMELESS VILLAGES PROJECT
Weinberg Villages Haleiwa
State of Hawaii

Agriculture
AG-1
Haleiwa Special District

Project Location
The proposed project is consistent with the General Plan's Objectives and Policies. The proposed transitional shelters project will provide decent temporary housing to homeless families until additional permanent affordable rental units are developed.

6.3 Development Plan
The Haleiwa project site is designated Agriculture on the Development Plan Land Use Map. The proposed residential land use is not consistent with the Development Plan land use designation for the site. However, exemptions from the Development Plan amendment process were approved by the City Council Resolution 91-206 (see Appendix B).

6.4 Zoning
The Land Use Ordinance (LUO) map designates the Haleiwa site as Ag-1 (General Agricultural district). Exemptions from the zoning change requirements were approved by the City Council Resolution 91-206 (see Appendix B).

6.5 Special Management Area and Special District
The site is not located within the Special Management Area as defined by Chapter 205A, Hawaii Revised Statutes. The Haleiwa project site is located in the Haleiwa Special District. However, the City and County Department of Land Utilization is allowing special district development standards and permitting requirements to be waived (departmental letter from Housing and Community Development to City Council Chair dated September 5, 1991).

6.6 Subdivision Requirements
DHS will ask for the right to file subdivision maps with the Land Court or the Bureau of Conveyances under Chapter 201E-210(a)(3)(c), but may not exercise such subdivision rights.

6.7 Land Uses and Development Standards
The City Council approved joint development of the project on more than one lot.
6.8 Permitting and Development Standards
The City Council Resolution 91-172 allowed exemption of the Haleiwa site from Chapter 21A, Article 4, Revised Ordinance of Hawaii (ROH) Conditional uses, to waive permitting requirement and development standards.

6.9 Summary of Required Land Use Permits and Approvals
The proposed action is exempt from development controls under Chapters 343 and 205A, HRS, and Chapter 33, ROH, as well as land-use laws and subdivision standards and controls, all subject to approval of such exemptions by the City Council, pursuant to §§46-15.1 and 201E-210, HRS. A consolidated 201E application package encompassing these proposed exemptions, was prepared and submitted to the City Council for its review and approval. Most of the exemptions were approved on September 5, 1991 by the Honolulu City Council Resolution 91-206. For further details please refer to Appendix B.
SECTION 7
ALTERNATIVES

7.1 No Action Alternative
This alternative would not provide 55 transitional shelters to homeless families and would help perpetuate the social problems associated with homelessness in Hawaii. This alternative would have no construction cost, but the absence of shelter for the homeless and presence of homelessness and poverty would continue to grow if left unattended. This alternative would not be a viable solution because it would result in an increase in the homeless population and poverty, and thus, further degradation of Hawaii's quality of life.

7.2 Alternative Sites
DHS considered other sites around the island. Most were rejected because of unsuitable size, topography, tenure (ownership), or lack of infrastructure. The Weinberg Villages Haleiwa site is one of six (6) sites that meet the criteria for the project.

7.3 Alternative Concepts
The original plan was to place about 500 homeless families in a single facility. Potential adverse impacts on the existing utility and public school system, and the surrounding community - not to mention the tenants - necessitated the redesign of the concept. This led to the revised focus of villages of 45 living units and 55 families.

Another alternative concept that was considered was a public subsidy to homeless families to pay for camping costs in public parks. This was rejected for several reasons. Foremost was the threat to public health for children to be living in such circumstances for any length of time. Secondary concerns were the lack of social services necessary to transition these families to being self-supportive; and the loss of public park use to the general public.

7.4 Alternative Building Designs
Three design concepts were evaluated for use as structures in the project.

-24-
Tents of various sizes and types were similar in price to the stick-built structures finally selected, with some tents surprisingly being more expensive. The tent design concept was rejected, however, because of public health concerns as well as secondary concerns of privacy.

Prefabricated units, including trailers, were significantly more expensive than the stick-built structures finally decided upon. This was partially due to the lack of donors of prefabricated units, whereas material and labor donors existed to make the stick buildings significantly cheaper.

The stick-built modular units were adopted as the most inexpensive concept while providing healthy, safe, and reasonably private living units for the tenants in the proposed project. Secondarily, this type of structure involves broader participation of community members in its construction and development.
SECTION 8
DETERMINATION

8.1 Determination
The development concept of village clusters on six scattered sites around the island has been selected for this project. This assessment indicates that the proposed Haleiwa project will have no significant adverse impact on the environment and an Environmental Impact Statement is not required. Therefore, in accordance with the provisions of Chapter 343, Hawaii Revised Statutes, a Negative Declaration is determined to be in order.

8.2 Findings and Reasons Supporting Determination
The impacts generated by construction of the proposed project are temporary. These impacts are minor in scale and will cause some inconvenience to the neighborhood during the period of construction. The use of mitigative measures will reduce or eliminate these impacts.

Adequate dust control measures will be utilized during construction to minimize airborne particles. Adherence to approved erosion control plans and the use of mitigative measures such as water sprinkling will reduce the potential for adverse impact on air quality.

Construction equipment will emit some air pollutants in the form of engine exhausts. With proper maintenance, emissions from these equipment will be minimized. Prevailing tradewinds will also help in dispersing the airborne pollutants.

Utilities improvement construction activity will create a temporary increase in noise levels. Heavy equipment used for excavation will be a source of noise. Mitigating measures such as the use of mufflers and limiting construction to daylight hours will be employed. Noise levels will comply with the State Department of Health noise regulations.
CORRECTION

THE PRECEDING DOCUMENT(S) HAS BEEN REPHOTOGRAPHED TO ASSURE LEGIBILITY
SEE FRAME(S) IMMEDIATELY FOLLOWING
SECTION 8
DETERMINATION

8.1 Determination
The development concept of village clusters on six scattered sites around the island has been selected for this project. This assessment indicates that the proposed Haleiwa project will have no significant adverse impact on the environment and an Environmental Impact Statement is not required. Therefore, in accordance with the provisions of Chapter 343, Hawaii Revised Statutes, a Negative Declaration is determined to be in order.

8.2 Findings and Reasons Supporting Determination
The impacts generated by construction of the proposed project are temporary. These impacts are minor in scale and will cause some inconvenience to the neighborhood during the period of construction. The use of mitigative measures will reduce or eliminate these impacts.

Adequate dust control measures will be utilized during construction to minimize airborne particles. Adherence to approved erosion control plans and the use of mitigative measures such as water sprinkling will reduce the potential for adverse impact on air quality.

Construction equipment will emit some air pollutants in the form of engine exhausts. With proper maintenance, emissions from these equipment will be minimized. Prevailing tradewinds will also help in dispersing the airborne pollutants.

Utilities improvement construction activity will create a temporary increase in noise levels. Heavy equipment used for excavation will be a source of noise. Mitigating measures such as the use of mufflers and limiting construction to daylight hours will be employed. Noise levels will comply with the State Department of Health noise regulations.
Traffic on the streets surrounding the project sites will be temporarily disrupted. A traffic control plan that will be approved by the City and County will be used to minimize impact on traffic circulation. The impact on public transport may necessitate the addition of extra buses on routes serving the project site. The access road to the site will have to be improved through the application of asphaltic concrete or bitumin and gravel seal.
"HOMELESS VILLAGES" PROJECT PARTICIPANTS

The following individuals and firms have donated their time and expertise to making this project possible:

Belt Collins Associates
Calvin Kim Associates
Design Partners Incorporated
Lacayo Planning
Phillips Brandt Reddick
R. M. Towill Corporation
APPENDIX A

Honolulu City Council Resolution 91-172
RESOLUTION

AUTHORIZING AND DENYING TEMPORARY EXEMPTIONS FROM CERTAIN REQUIREMENTS RELATING TO THE DEVELOPMENT OF THE WEINBERG VILLAGES PROJECT.

WHEREAS, it is currently estimated that on Oahu, there are about 8,000 homeless persons on any given day of which 3,000 are children; and

WHEREAS, many more people are expected to be displaced from their homes and become homeless in the years to come; and

WHEREAS, families with children are the fastest growing segment of the homeless population; and

WHEREAS, the State Department of Human Services (DHS), with assistance from the Mayor of the City and County of Honolulu and his Administration and several private corporations, is proposing in D-641 (1991) to develop "villages" where temporary transitional housing units and social services will be provided for homeless families on the properties identified as TMK: 2-9-26: Portion of 1 ("Manoa"), TMK: 3-9-10: Portion of 1 ("Hawai‘i Kai"), TMK: 4-1-15: Portion of 15 ("Waimanalo"), TMK: 5-4-4: Portion of 21 ("Hauula"), TMK: 8-2-1: Portion of 1 ("Haleiwa"), TMK: 8-5-3: Portion of 21 ("Waianae"), and TMK: 9-1-16: Portions of 2, 21, 22, 24 ("Ewa"), Oahu, to be known collectively as the Weinberg Villages (the "Project"); and

WHEREAS, subsequent to the submission of the originally proposed sites, as a result of community review and input, alternative sites identified as TMK: 6-2-6: 6, 7 ("Haleiwa Alternative"), TMK: 5-6-1: Portion of 55 ("Ma‘ilahohana"), and TMK: 3-9-12: Portion of 1 ("Koko Head Park") were proposed and recommended by the area communities, and DHS subsequently studied and indicated that those sites were suitable and appropriate; and

WHEREAS, the City Council is empowered to authorize exemptions from statutes, ordinances, charter provisions, and rules of any governmental agency relating to planning, zoning, construction standards for subdivision, development and improvement of land, and the construction of units thereon pursuant to Sections 46-15.1 and 201E-210 of the Hawaii Revised Statutes (HRS); and

WHEREAS, the Project is consistent with the housing goals and objectives of the City; and
RESOLUTION

WHEREAS, the City finds that the granting of exemptions is necessary for the timely and successful implementation of the Project; and

WHEREAS, the City finds that the exemptions do not adversely affect the public health, safety and welfare; now, therefore,

BE IT RESOLVED by the Council of the City and County of Honolulu that it authorize the following exemptions from certain requirements for the Project at TMK: 2-9-26: Portion of 1 ("Manoa"), TMK: 4-1-15: Portion of 15 ("Waimanalo"), TMK: 8-5-3: Portion of 21 ("Waianae") and TMK: 9-1-16: Portions of 2, 21, 22 24 ("Ewa"), as may be applicable:

1. Exemptions from the Department of General Planning Procedures for the Amendment of State Land Use Boundaries for Parcels of Fifteen Acres or Less to allow the Project to be constructed on lands classified Agricultural on the State Land Use Map as it applies to the Waianae and Ewa sites.

2. Exemptions from Chapter 32 of the Revised Ordinances of Honolulu (ROH), as amended, Development Plans, to allow the Project to be constructed on lands designated Public Facility, Preservation, Parks and Recreation and Agricultural on the Development Plan maps.


4. Exemptions from Sections 21A-5.10-1 and 21A-5.20-5, ROH, Uses and Development Standards, to allow joint development of the Project on more than one lot, as it applies to the Ewa site.

5. Exemptions from Chapter 21A, Article 4, ROH, Conditional Uses, to waive permitting requirements and development standards, as it applies to the Ewa site.

6. Exemptions from Table 1, Section 21A-3.70, ROH, Off-Street Parking, to allow provisions for only 1 parking stall per unit plus 10 stalls for the administrative offices and child care uses for the Project.
RESOLUTION

7. Exemptions from Section 21A-6.30, ROH, Site Development Plan, to waive the requirement to process the Project under the procedures for Cluster Housing, Planned Development-Housing or Subdivisions.

8. Exemptions from the following sections of Chapter 22, ROH, relating to the subdivision of land and applicable sections of the Subdivision Rules and Regulations of the Department of Land Utilization, as it applies to the Project:
   a. Section 22-2.3, relating to the installation and Energizing of Street Lighting Systems to allow overhead systems.
   b. Article 5, relating to the construction of underground utilities to allow overhead utilities.
   c. Article 7, relating to Parks and Playgrounds to allow picnic facilities and tot play areas in each cluster to satisfy park dedication requirements.

9. Exemptions from Section 25-4.3, ROH, Housing Code of the City and County of Honolulu, Revised 1987, to allow construction of units containing 120 to 240 square feet as shown in the preliminary house plans and outline specifications of the Project.

10. Exemptions from Section 2516(c)(2), as amended, Uniform Building Code, 1988 (Chapter 16, Article 1, ROH) to allow all Project structures to be less than 20 inches off the ground, but not less than six inches.

11. Exemption from the payment of building permit fees required under Section 18-6.1, ROH, for the Project.

12. Exemption from the payment of grading permit fees required under Section 23-2.4, ROH, for the Project.

13. Deferral of Wastewater System Facility Charges and Water Development Fees for five years pursuant to applicable rules of the Department of Public Works and the Board of Water Supply.

BE IT FURTHER RESOLVED that the above exemptions are authorized subject to the following conditions:
RESOLUTION

1. The exemptions granted only apply to this Project for the purpose of developing transitional shelters and providing support services for homeless families, using units constructed as described in D-641, 1991, and configuring such units into village clusters as described therein.

2. The exemptions granted will only be in effect for five years after initial occupancy in each Village.

3. DHS and the nonprofit corporations hired to operate the Project shall work with the affected neighborhood boards in the management and operation of the Project and shall attempt to resolve their major concerns, to the extent practical.

4. Deferred water and sewer development fees will be payable by the State of Hawaii if permanent structures or uses are developed.

5. All existing mature trees must be retained.

6. The Project shall conform to the requirements of Chapters 205A and 343, HRS, relating to shoreline management and environmental review regulations.

7. Beginning five years after the date of initial occupancy at each site, all structures, including fencing, must be removed within 6 months. Landscaping elements may remain.

8. The exemptions authorized herein shall be of no further force and effect if satisfactory work progress, as provided in Section 18-5.4, ROH, has not been made on the Project within one year of the date of this Resolution's adoption.

BE IT FURTHER RESOLVED that if conditions 1 through 8, stated above, are not met, exemptions 1 through 9, stated above, shall be void.

BE IT FURTHER RESOLVED that in addition to the above conditions, the following special conditions shall also apply to the following sites:

Manoa: The applicant shall not apply for building permits for the Manoa Village until October 1, 1991. However, if
RESOLUTION

the University of Hawaii notifies DHS and the Council in writing prior to October 1, 1991, that it has encumbered planning monies of not less than $500,000 for faculty rental housing at the Manoa site, then the applicant shall not apply for the permits for the Manoa Village until December 1, 1991. If the University applies prior to December 1, 1991, for the necessary permits pursuant to Act 15, SLH 1988, to develop the faculty housing, then the exemptions authorized herein shall be void for that site.

Waimanalo: The applicant shall not apply for building permits for the Waimanalo site until December 1, 1991. DHS shall work with the elected officials from Waimanalo to establish a pilot, community-based "ohana", "hanai", or "backyard" alternative program in Waimanalo to provide services to and house the homeless. If DHS notifies the Council in writing prior to December 1, 1991, that such a program has been established pursuant to the Homeless Families Assistance Act of 1991, the exemptions authorized herein shall be void for that site.

Ewa: The applicant shall locate the Village structures at the Ewa site toward the southern property boundary, as practical, to increase the setback and screening from highway traffic and reduce noise and dust for Village tenants. The applicant shall also coordinate construction and operation of the Village so as to not interfere with the development and operation of new park lands in Kapolei.

BE IT FURTHER RESOLVED that the above exemptions are denied and the Project is disapproved for TMK: 3-9-10: Portion of 1 ("Hawaii Kai"), TMK: 5-4-4: Portion of 1 ("Hauula"), and TMK: 6-2-1: Portion of 1 ("Haleiwa").

BE IT FURTHER RESOLVED that after reviewing the original sites herein disapproved and the alternative sites subsequently proposed, DHS may submit plans for new proposed sites, including those disapproved herein, pursuant to §46-15.1 and §200E-210, HRS, and based on the comments by the affected communities for each new site.

BE IT FURTHER RESOLVED that prior to the issuance of any building permits for the sites approved herein:

1. DHS shall propose to the Council at least one substitute site for each site disapproved. The substitute site may be a site disapproved herein.
RESOLUTION

substitute site shall be within the same Neighborhood Board area as the site disapproved; and

2. The Council shall have approved exemptions from City development requirements necessary for each substitute or resubmitted site pursuant to the authority of §46-15.1 and §201E-210, HRS.

BE IT FURTHER RESOLVED that the Council commends the Governor, the Mayor, DHS, DHCD, the participating public and private agencies, and the affected communities for forming a working partnership in moving the Weinberg Villages Project forward and for their continuing efforts on behalf of the homeless.

BE IT FURTHER RESOLVED that the preliminary plans and specifications for the Project may be modified as necessary to accommodate existing site conditions, such as topography, significant trees and other vegetation.

BE IT FURTHER RESOLVED that except as authorized herein, the final plans and specifications for the Project shall not substantially deviate from the preliminary plans and outline specifications submitted to the Council.

BE IT FURTHER RESOLVED that no action may be prosecuted or maintained against the City and County of Honolulu, its officials or employees, on account of actions taken by them in reviewing or approving the plans and specifications or in granting these exemptions.

BE IT FURTHER RESOLVED that if any provision of this Resolution, or the application thereof to any person or circumstance is held invalid, the invalidity shall not affect other provisions or applications of the Resolution which can be given effect without the invalid provision or application, and to this end the provisions of this Resolution are severable.
RESOLUTION

BE IT FINALLY RESOLVED by the Council of the City and County of Honolulu that the Clerk be, and is hereby directed to transmit copies of this Resolution to the Department of Housing and Community Development.

INTRODUCED BY:

Arnold Morgado, Jr. (BR)

Councilmembers

DATE OF INTRODUCTION:

July 22, 1991
Honolulu, Hawaii

(ACS/080791/cc)
APPENDIX B
Honolulu City Council Resolution 91-206
RESOLUTION

AUTHORIZING TEMPORARY EXEMPTIONS FROM CERTAIN REQUIREMENTS RELATING TO THE DEVELOPMENT OF THE WEINBERG VILLAGES PROJECT AT KOKO HEAD, HALEIWA, AND MALEKAHANA, OAHU.

WHEREAS, on August 7, 1991, the Council of the City and County of Honolulu adopted Resolution No. 91-172, FD-1, which authorizes exemptions; with conditions, from certain development requirements to allow construction of temporary transitional housing units where shelter and social services will be provided for homeless families, known as the Weinberg Villages (the "Villages") on the properties identified as TMK: 3-9-26: Portion of 1 ("Manoa"), TMK: 4-1-15: Portion of 15 ("Waimanalo"), TMK: 8-1-3: Portion of 21 ("Waianae"), and TMK: 9-1-16: Portion of 21, 22 and 24 ("Ewa"), Oahu; and

WHEREAS, by Resolution No. 91-172, FD-1, the City Council requires the State Department of Human Services (DHS) to propose to the Council substitute sites for the development of Villages in the Hawaii Kai, Hauula (Koolauloa) and Haleiwa Neighborhood Board areas; and

WHEREAS, DHS has located three substitute sites for possible development of the Weinberg Villages on properties identified as TMK: 3-9-12: Portion of 1 ("Alternative Hawaii Kai"), TMK: 6-2-6: Portions of 6 and 7 ("Alternative Haleiwa"), and TMK: 5-6-1: Portion of 47 and 64 ("Malekahana"), Oahu ("Alternate Sites") and the Department of Housing and Community Development (DHCD) has submitted preliminary plans and outline specifications for development of the Villages at the alternate sites (the "Project") as described in Departmental Communications 733, dated August 14, 1991, and 787, dated September 5, 1991, pursuant to Sections 46-13.1 and 201E-210 of the Hawaii Revised Statutes (HRS); and

WHEREAS, pursuant to Sections 46-15.1 and 201E-210, HRS, the City Council is empowered to authorize exemptions from statutes, ordinances, charter provisions and rules of any governmental agency relating to planning, zoning, construction standards for subdivision, development and improvement of land and the construction of units; and

WHEREAS, the Project is consistent with the housing goals and objectives of the City; and

WHEREAS, the granting of the exemptions is necessary for the timely and successful implementation of the Project; and

C
RESOLUTION

WHEREAS, the exemptions do not adversely affect the public health, safety and welfare; now, therefore,

BE IT RESOLVED by the Council of the City and County of Honolulu that it authorize exemptions from certain requirements to allow construction of the Weinberg Villages at the Alternative Hawaii Kai, Alternative Haleiwa, and Malaelehana sites as follows:

1. Exemptions from the Department of General Planning Procedures for the Amendment of State Land Use Boundaries for Parcels of Fifteen Acres or Less to allow the Villages to be constructed on lands classified Agricultural on the State Land Use Map as it applies to the Alternative Haleiwa site.

2. Exemptions from Chapter 32 of the Revised Ordinances of Honolulu (ROH), as amended, Development Plans, to allow the Project to be constructed on lands designated Preservation, Agricultural and Parks and Recreation on the Development Plan maps as it applies to all alternate sites.

3. Exemptions from Sections 21A-5.10-1 and 21A-5.20-5, and Table 4-A of the Land Use Ordinance in the Revised Ordinances of Honolulu (ROH), Permitted Uses, to allow the Project to be constructed on lands zoned Restricted Preservation and Restricted Agricultural, as it applies to the Alternative Hawaii Kai and Alternative Haleiwa sites, respectively.

4. Exemptions from Section 21A-6.30, ROH, Site Development Plan, to waive the requirement to process the Project under the procedures for Cluster Housing, Planned Development-Housing or Subdivisions, as it applies to all alternate sites.

5. Exemptions from Sections 21A-5.10-1 and 21A-5.20-5 and Table 4-B, ROH, Uses and Development Standards, to waive development standards for the Villages as it applies to the Alternative Hawaii Kai and Alternative Haleiwa sites.

6. Exemptions from Section 21A-5.20-5, ROH, Development Standards, to allow joint development of the Villages on more than one lot, as it applies to the Alternative Haleiwa site.
RESOLUTION

7. Exemptions from Chapter 21A, Article 4, ROH, Conditional Uses, to waive permitting requirements and development standards, as it applies to the Alternative Haleiwa site.

8. Exemptions from Section 21A-7.90 and Table 21-G, ROH, Haleiwa Special District, to waive the development standards as they apply to the Alternative Haleiwa site.

9. Exemptions from Section 21A-8.30, ROH, Application Procedures, to waive the Special District permitting procedures as it applies to the Alternative Haleiwa site.

10. Exemption from the State of Hawaii Land Use Commission State Land Use District Regulations, Section 3-4, Permissible Uses Within the "C" Conservation District, which incorporates the implementing rules of the State of Hawaii Department of Land and Natural Resources Conservation District regulations, to allow the Project to be constructed on land designated Conservation as it applies to the Alternative Hawaii Kai site.

11. Exemptions from Table 1, Section 21A-3.70, ROH, Off-Street Parking, to allow provision of a total of 60 parking stalls at the Alternative Hawaii Kai site, 75 parking stalls at the Alternative Haleiwa site and 55 parking stalls at the Maakahana site.

12. Exemptions from the following sections of Chapter 22, ROH, relating to the subdivision of land and applicable sections of the Subdivision Rules and Regulations of the Department of Land Utilization, as it applies to all alternate sites:
   a. Section 22-2.3, relating to the Installation and Energizing of Street Lighting Systems to allow overhead systems.
   b. Article 5, relating to the construction of underground utilities to allow overhead utilities.
   c. Article 7, relating to Parks and Playgrounds to allow picnic facilities and tot play areas in each cluster to satisfy park dedication requirements.

-3-
RESOLUTION

13. Exemptions from Section 25-4.3, ROH, Housing Code of the City and County of Honolulu, Revised 1987, to allow construction of units containing 120 to 240 square feet as shown in the preliminary house plans and outline specifications, as it applies to all living units at all alternate sites.

14. Exemptions from Section 2516(c)(2), as amended, Uniform Building Code, 1988, Chapter 16, ROH, Article 1, to allow all structures to be less than 20 inches off the ground, but no less than six inches, at all sites, depending upon the topography of each alternate site.

15. Exemption from the payment of building permit fees required under Section 18-6.1, ROH, for the Project.

16. Exemption from the payment of grading permit fees required under Section 23-2.4, ROH, for the Project.

17. Deferral of Wastewater System Facility Charges required pursuant to Section 11-10.1, ROH, for five years for the Project.

18. Deferral of Water Development Fees for five years pursuant to applicable rules of the Board of Water Supply.

BE IT FURTHER RESOLVED that the above exemptions are authorized for the alternate sites subject to the following conditions:

1. The exemptions granted only apply to the development of the Villages which will be used exclusively as a transitional shelter for homeless families as described in D-733, 1991, the request from DHCD to the City Council dated August 12, 1991.

2. The exemptions granted will only be in effect for five years after initial occupancy in each Village.

3. DHS and the nonprofit corporations hired to operate the Villages shall work with the affected neighborhood boards in developing the program and shall attempt to resolve their major concerns, to the extent practical.
RESOLUTION

4. Deferred water and sewer development fees will be payable by the State of Hawaii if permanent structures or uses are developed.

5. All existing mature trees must be retained.

6. Shoreline Management Area permits must be obtained where applicable prior to the issuance of building permits.

7. Beginning five years after the date of initial occupancy at each site, all structures, including fencing, must be removed within six months. Landscaping elements may remain.

8. The exemptions authorized herein shall be of no further force and effect if satisfactory work progress, as provided in Section 18-5.4, ROH, has not been made on the Project within one year of the date of this Resolution's adoption.

BE IT FURTHER RESOLVED that if conditions 1 through 8, stated above, are not met, exemptions 1 through 18, stated above, shall be void.

BE IT FURTHER RESOLVED that in addition to the above conditions, the following special conditions shall also apply to the following site:

Alternative Hawaii Kai: The applicant shall not apply for building permits for the Hawaii Kai site until December 1, 1991. DHS shall work with the elected officials from Hawaii Kai, churches, community associations and service clubs, charitable organizations, and all available resources to establish a pilot, community-based alternative program to provide services to and house not less than fifty homeless families with children. If DHS notifies the Council in writing prior to December 1, 1991, that such a program has been established pursuant to the Homeless Families Assistance Act of 1991, the exemptions authorized herein shall be void for that site.

BE IT FURTHER RESOLVED that the preliminary plans and specifications may be modified as necessary to accommodate existing site conditions, such as topography, significant trees and other vegetation.
RESOLUTION

BE IT FURTHER RESOLVED that except as authorized herein, the final plans and specifications for the Project shall not substantially deviate from the preliminary plans and outline specifications submitted to the Council.

BE IT FURTHER RESOLVED that no action may be prosecuted or maintained against the City and County of Honolulu, its officials or employees, on account of actions taken by them in reviewing or approving the preliminary plans and outline specifications or in granting these exemptions.

BE IT FURTHER RESOLVED that if any provision of this Resolution, or the application thereof to any person or circumstance is held invalid, the invalidity shall not affect other provisions or applications of the Resolution which can be given effect without the invalid provision or application, and to this end the provisions of this Resolution are severable.
RESOLUTION

BE IT FINALLY RESOLVED that copies of this Resolution be transmitted to the Department of Housing and Community Development.

INTRODUCED BY:
Arnold Morgado, Jr. (BR)

DATE OF INTRODUCTION:
August 15, 1991
Honolulu, Hawaii

Councilmembers

CITY COUNCIL

I hereby certify that the foregoing Resolution was adopted by the Council of the City and County of Honolulu on the date and by the vote indicated to the right.

ATTEST:
RAYMOND K. PUA
CITY CLERK

ARNO LD MORGADO, JR.
CHAIR AND PRESIDING OFFICER

Dated SEP 5, 1991

Resolution No. 91-206
FD-1
APPENDIX C

Outline Specifications
OUTLINE SPECIFICATIONS

TEMPORARY HOUSING FACILITIES FOR THE HOMELESS

FOR

DEPARTMENT OF HUMAN SERVICES
STATE OF HAWAII

Design Partners
Incorporated

Architects
Interior Designers

JUNE 1991
TABLE OF CONTENTS

DIVISION 1 - GENERAL REQUIREMENTS
01001 General Conditions
01340 Submittals and Substitutions
01560 Environmental Protection
01710 Cleaning

DIVISION 2 - SITEWORK
02100 Site Preparation
02200 Excavating, Filling and Grading
02280 Termite Soil Treatment
02444 Chainlink Fence
02480 Landscape Planting
02870 Site Furnishing
02813 Asphaltic Concrete Paving

DIVISION 3 - CONCRETE
03100 Concrete

DIVISION 6 - WOOD AND PLASTICS
06100 Rough Carpentry
06200 Finish Carpentry
06230 Hardboard Siding
06311 Preservative Treatment for Wood

DIVISION 7 - THERMAL AND MOISTURE PROTECTION
07310 Composition Shingle Roofing
07600 Sheet Metal Work
07920 Sealants

DIVISION 8 - DOORS AND WINDOWS
08200 Wood Doors
08527 Jalousies
08710 Finish Hardware

DIVISION 9 - FINISHES
09650 Resilient Flooring
09900 Painting

TEMPORARY HOUSING FOR THE HOMELESS
DIVISION 10 - SPECIALTIES
10800 Bath Accessories

DIVISION 11 - EQUIPMENT
11450 Appliances

DIVISION 12 - FURNISHINGS
12300 Kitchen Cabinets

DIVISION 15 - MECHANICAL
15400 Plumbing

DIVISION 16 - ELECTRICAL
16050 Electrical Work
SECTION 01001 - GENERAL CONDITIONS

PART 1 - GENERAL

1.01 AIA Document A201 "General Conditions of the Contract for Construction," 1987 Edition is herein made a part of these specifications.

*****

HOUSING FOR THE HOMELESS

General Conditions
01001-1
SECTION 01340 - SUBMITTALS AND SUBSTITUTIONS

1.01 REQUIREMENTS
   A. Review, stamp approval and submit as to cause no delay of work:
      1. Shop Drawings
      2. Product Data
      3. Samples
      4. Substitutions

SECTION 01560 - ENVIRONMENTAL PROTECTION

1.01 REQUIREMENTS
   1. Comply with requirements listed below.
   2. Comply with all applicable laws, regulations, and ordinances.

1.02 See General Requirements

1.03 RUBBISH DISPOSAL
   A. No burning at site.
   B. Haul debris and waste materials to legal dump area.
   C. Keep area clean.

1.04 DUST & NOISE
   A. Conform to Dept. of Health, Public Health Regulations at all times.

1.05 EROSION
   A. Maintain grade to preclude damage to adjoining properties from water eroding soil; by providing berms, ditches, etc.

1.06 OTHERS
   A. Trucks and vehicles shall not carry materials onto pavement.
   B. Trucks shall be covered, per PUC regulations.
   C. Waste water shall not be discharged into existing streams, waterwasp or drainage system, unless treated per Dept. of Health regulations.
D. No dumping of concrete or paint at job site.
E. Vehicle refueling and maintenance away from jobsite except emergencies.

SECTION 01710 - CLEANING

1.01
A. Keep site free from accumulation of waste, debris and rubbish.

SECTION 02100 - SITE PREPARATION

1.01 WORK:
A. The Contractor shall clear the premises of all obstacles and obstructions, the removal of which will be necessary for the proper reception, construction, execution and completion of other work included in this Contract.
B. Within the clearing and grading limited and where indicated on the Drawings, grub entire ground surface of all grass, weeds, and plants which are not indicated to remain.
C. The Contractor shall preserve and protect all structures, utilities, sidewalks, curbs, gutters, pavements, etc., which are to remain. Contractor shall immediately repair all existing improvements damaged by his work.
D. Dispose of all debris and waste materials accumulated.

SECTION 02200 - EARTHWORK

1.01
A. Excavate for footings, foundations, etc.
B. Filling and backfilling as required.
C. Finish grading.
D. Cushion fill under slabs on grade.
E. Construction layout.

SECTION 02280 - TERMITE SOIL TREATMENT

1.01 Treat soil for termite control in accordance with Hawaii Pesticide Law.
SECTION 02480 - LANDSCAPE PLANTING

PART 1 - GENERAL

1.01 SCOPE OF WORK:

A. Provide landscape plantings in the areas shown on the drawings with plants in a healthy, vigorous growing condition. All work indicated on the drawings or by notes shall be provided whether or not specifically mentioned in this Standard or the Specifications. Any items not specifically shown in the Drawings or specified, but normally required to conform with such intent, are considered part of the work.

B. The work of this Section includes but is not limited to the following:

1. Clearing and grubbing.
2. Pre-planting weed control.
3. Installation of backfill mix.
5. Fine grading.
6. Planting operations.
7. Maintenance
8. Warranty.

1.02 CODES AND STANDARDS: Perform work in accordance with all applicable laws, codes, and regulations required by authorities having jurisdiction over such work and provide for all inspections and permits required by Federal, State, and local authorities in furnishing, transporting, and installing materials.

1.03 SUBMITTALS:

A. Substitutions: Substitutions shall not be permitted unless authorized by the Owner. Approval of proposed substitutions is at the sole discretion of the Owner. The Owner is under no obligation to approve substitution requests for any reason.
B. Construction Schedule: At the pre-construction meeting, provide a written projected planting schedule noting the estimated completion date, number of working days required and any special coordination requirements.

C. Selection, Tagging and Ordering Plant Material:

1. Submit a request for inspection and documentation to Landscape Architect at least one month prior to start of work under this Section that all plant material has been ordered.

2. Plants shall be subject to inspection and rejection by Landscape Architect at place of growth and after delivery for conformity to Specifications.

3. Plants identified as specimen, field grown, field stock, and all palms with a trunk greater than 10 ft. will be inspected at place of growth by the Landscape Architect.

1.04 JOB CONDITIONS:

A. Acceptance of Previous Work: Inspect and accept the condition of the site relative to this Section before commencing with the work covered herein. If the condition of the site is not acceptable, notify the Owner. By proceeding with the work under this Section, the Contractor indicates his acceptance of all previous related work.

B. Meet on Site: Prior to commencing work, meet with the Landscape Architect and all other concerned parties on the site to review the work under this Section. Request this meeting five (5) working days prior to the desired meeting date.

C. Underground Utilities and Obstructions: Verify the location of all underground utilities and other obstructions that may affect the work. Repair all damage to any utilities or other underground obstruction.
D. Protection:

1. Provide necessary safeguards and exercise caution against injury or defacement of existing site improvements. Prevent vehicles of any kind from passing over sidewalk, curbs, etc., unless adequate protection is provided. Do not store materials or equipment, or operate equipment near of under the branches of any existing plants that are to remain, except as actually required for construction in those areas.

2. Return damaged areas to their previous undisturbed conditions.

E. Clean Up: Keep all areas of work clean, neat and orderly at all times. Clean all construction areas at the end of each day.

F. Samples and Tests: The Owner reserves the right to take and evaluate samples of materials for conformity to specifications at any times. Furnish samples upon request by the Owner. Rejected materials shall be immediately removed from the site.

G. Pre-Maintenance Inspection and Final Inspection:

1. At the completion of all landscape planting operations and prior to the beginning of the formal maintenance period, the Pre-Maintenance Inspection shall be held. At the completion of the formal maintenance period, the Final Inspection shall be held.

2. Request these inspections of the Owner five (5) working days prior to the completion of work in order that a mutually agreeable time for inspection may be arranged.

3. The Landscape Architect, Contractor, and Owner, or their representatives, shall be present at the inspection.

4. At the time of inspection, the Contractor shall have all the areas under the Contract free of weeds, dead leaves and trash, neatly cultivated and raked. All stakes guys and plant basins shall be in good order. At the Final Inspection, lawns shall be neatly cut and all clippings removed.
5. If, after the Pre-Maintenance Inspection, the Landscape Architect and the Owner are of the opinion that all work has been performed in accordance with the Drawings and Specifications, written notice of preliminary acceptance will be given. This report will note any items which must be corrected, and state the date of commencement and completion of the formal maintenance period.

6. If, after the Final Inspection, the Landscape Architect and the Owner are of the opinion that all work has been performed in accordance with the Drawings and Specifications, written notice of acceptance and completion of the Project will be given. If all or certain portions of the work are not acceptable under the terms and intent of the Drawings and Specifications, a reasonable amount will be retained and the final payment and the formal maintenance period for the unaccepted work and any related items shall be extended at no cost to the Owner until the defects in the work have been corrected and the work is accepted by the Landscape Architect and the Owner.

1.05 WARRANTY:

A. Plant Material:

1. Plant materials furnished or relocated under this Section shall be warranted in writing, from a period of 3 months from the date of final acceptance against improper installation, defective, unsound, or diseased conditions that may appear.

2. Upon receipt of written notice from the Owner the death of any warranted plant materials during the Warranty Period, the subject plant materials shall be promptly replaced with the same species as originally planted, and shall be of a size closely approximating the size of the plant if normal growth had occurred since the original planting. Replacement shall be subject to all requirements of the Specifications.

3. When plants are replaced, advise the Owner, in writing of the necessary establishment maintenance which must be performed. If this information is not provided, the Contractor will be liable for total cost of replacement should the replaced plant die.
4. The expense of replacement shall be borne by the Contractor if replacement is necessary during the maintenance period, or shall be evenly shared by the Owner and the Contractor if replacement is necessary after the maintenance period but during the remainder of the warranty period.

5. Contractor shall not be held liable for loss of plant materials after final acceptance due to lack of care, vandalism, acts of God, or accident. The Owner must show that the plants have been maintained properly.

B. Liability: The liability under the warranty shall include the repair of damage to the work of other contractors, or damage to the Owner's property caused by the failure of the work performed under this Section. All of the provisions of this Section apply to work performed to satisfy the requirements of the warranty.

PART 2 - PRODUCTS

2.01 FERTILIZER:

A. N-P-K as recommended by soil analysis, uniform in composition, free-flowing and suitable for application with approved equipment, delivered to the site in un-opened containers, each fully labeled, conforming to the applicable fertilizer laws, and bearing the name or mark of the manufacturer.

B. Plant Tablets: 'Grow Power' 7 gram tablet (12-8-8)

2.02 ORGANIC SOIL AMENDMENT:

A. Redwood Shavings: Nitrogen stabilized and passing through a 1/8" screen.

B. 'Grow-Power Plus'

2.03 PRE-PLANTING HERBICIDE: "Round-Up" or equal.

2.04 PRE-EMERGENT WEED CONTROL: "Ronstar-G", "Treflan", "Eptam", "Vegitex" or equal.
2.05 PLANT MATERIAL:

A. Quantities: Provide sufficient quantities of plant materials needed to complete the work as shown on the Planting Plans and indicated in the Drawings. Quantities indicated on the Plant List are approximate only and are provided for the convenience of the Contractor. The Planting Plans shall have precedence over the Plant List.

B. Nomenclature: Names of plants shall conform with names generally accepted in the local nursery trade, and as interpreted by the Landscape Architect.

C. Condition:

1. All trees, shrubs, vines and ground covers shall have a normal habit of growth and shall be sound, healthy, vigorous and free from insect infestations.

2. The minimum acceptable size of all palms and shrubs measured after pruning, with branches in normal positions, shall conform to the measurements specified on the Plant List.

3. Caliper measurements shall be taken at a point on the trunk 6" above natural ground line for trees up to 4" in caliper and at a point 12" above the natural ground line for trees over 4" in caliper.

4. Plants that meet the measurements specified, but do not possess a normal configuration or balance of height and spread will be rejected.

5. Trees and shrubs larger in size than specified may be used, but the use of larger plant materials will make no change in the Contract price.

6. Trees and shrubs shall have been grown in containers of the size stated on Drawings, and shall have sufficient roots to hold the root ball together after removal from containers without being rootbound.

7. Specimen, field grown and field stock palms shall have a root ball of sufficient size to support the plant's recovery from transplanting. Palms delivered with small or inadequate root balls will be rejected.
8. Any tree or shrub with weak, thin trunk not capable of supporting itself when planted in the open will be rejected.

9. Trees will be straight and of uniform shape without damaged, crooked, or multiple leaders, unless specified. Trees with abrasions of the bark, sunscalds, disfiguring knots, or fresh cuts or limbs over 3" which have not been pruned and painted or completely calloused, will be rejected.

10. Rooted cuttings shall be healthy, vegetative material with well-established roots at two or more nodes.

11. Sprigs shall be healthy vegetative material obtained from nursery grown stock free from other foreign grasses. Coarse grass and groundcover stolons shall be minimum 4" long.

2.06 WATER: Unless noted otherwise, non-potable water will be readily available to the Landscape Contractor at no expense to the Landscape Contractor.

2.07 MISCELLANEOUS MATERIALS:

A. Wood Stakes: 2x2x8 ft. rough construction grade redwood or eucalyptus with no paint or stain.

B. Hose and Wire Ties: 5/8" diameter hose with #12 ga. galvanized iron wire.

C. Guy Wire: #9 ga. galvanized iron.

D. Rebar: #4 24" minimum length for 15 and 25 gal. trees. #7 30" minimum length for Field Stock trees.

E. Marker: Plastic surveyor tape. Bright color, minimum 18" long.

F. Tree Paint: Cabot Tree Seal or equal.

G. Backfill Mix for Coconuts: Backfill all coconuts with clean coral sand.

H. Backfill Mix: Mix thoroughly prior to placing:

- 4 parts imported screened soil
- 1 part clean coral sand
- 1 part organic soil amendment
PART 3 - EXECUTION

3.01 CLEARING

A. Clear all planting areas of existing vegetation not specified to remain and all other debris and foreign material considered a hindrance to planting operations and/or unsightly in appearance.

B. Maintain previously established grades and swales.

3.02 PRE-PLANTING WEED CONTROL:

A. Apply pre-planting herbicide to all visible weeds, before and after soil placement.

B. Protect all existing plants from damage.

3.03 SOIL PREPARATION:

A. Uniformly distribute a 1" layer of redwood shavings, and Gro-Power fertilizer (at 75 lbs per 1,000 per Sq. Ft.) over all planting areas.

B. Roto-till the top 4" of all planting areas to evenly incorporate the amendments into the soil.

3.04 FINE GRADING:

A. Perform finish grading as necessary and as indicated on the drawings. Grades shall be smooth and even on a uniform plane with no abrupt changes or pockets, and shall slope away from all buildings. Verify the surface drainage of all planting areas, and notify the Owner of any discrepancies, obstructions, or other conditions considered detrimental to proper execution of the work. Materials used for fill in mounded areas shall be porous and free draining, and shall be approved by the Owner prior to installation.

B. Landscape work shall be tied to existing controls such as existing trees and landscape features, revetments, utility lines, pavement and curbs, etc. Finished grades shall bear proper relationship to such controls. Adjust all new work as necessary to meet existing controls.

C. Immediately prior to planting operations, all planting areas shall be cleaned of weeds, rocks over 1" in diameter, and clumps of earth that will not break up.

TEMPORARY HOUSING FOR THE HOMELESS

Landscape Planting
02480-8
SOIL AND DRAINAGE CONDITIONS:

A. Notify Owner of all soil or drainage conditions encountered during planting operations which the Contractor considers detrimental to growth of plant material. Provide a cost proposal for the correction of the problem for approval before proceeding with planting work.

B. If drainage conditions of plant pits appear unsatisfactory, test drainage by filling with water. Conditions permitting the retention of water in planting pit for an excessive period of time shall be brought to the attention of Owner.

PLANTING OPERATIONS:

A. Handling Plants:
   1. Handle plants in a manner to avoid any damage to the plant.
   2. Protect plants at all times from sun or drying winds. Plants that cannot be planted immediately on delivery shall be kept in the shade, well protected, and adequately watered.
   3. All specimen, field grown and field stock palms shall be planted the same day they are delivered to the site.

B. Plant Pits: All trees and shrubs shall be installed in round pits with vertical sides as shown on the planting details.

C. Setting Container and Larger Plants:
   1. Plants shall be centered and set on compacted backfill mix that has been puddled and settled. Distribute ½ total planting tablets evenly around rootball.
   2. Plants shall be set with the soil level even with the finish grade and planted to give the best appearance in relationship to adjacent structures or surroundings.
3. Use appropriate backfill mix to continue filling plant pits. Set plant plumb and brace rigidly in position until backfill mix has been tamped solidly around rootball. When 3/4 of the pit is backfilled, water thoroughly, saturating the rootball.

4. Evenly distribute planting tablets per manufacturer's instructions. Continue filling pit to finish grade with backfill mix.

5. When the plant pit is filled, form saucer berm around plants as noted on details.

6. Water all plants immediately after planting.

D. Staking and Guying: Immediately after planting, stake all 5 gal. and smaller trees. Guy all larger trees.

E. Ground Cover: Install plant material in moist soil in the areas and at the spacings shown, in neat rows, insuring complete coverage of all planting areas including under and around palms and shrubs. Spacing shown in the Plant List or on the Drawings are triangular spacing, unless otherwise noted.

F. Pre-Emergent Weed Control: Immediately after planting, apply pre-emergent weed control materials to all planted areas which will not be seeded.

3.07 PLANTING MAINTENANCE:

A. Maintain all plants and planted areas in optimum growing condition and appearance.

B. Maintenance, as specified below, shall coincide with the delivery of the first plant materials to the site and shall continue 90 days after commencement of the formal maintenance period or until the approval of the final inspection. Care of plant materials during installation is not considered part of the formal maintenance period.

C. Maintenance shall include, but is not limited to:

1. Protect areas susceptible to traffic by erecting barricades immediately after planting.

2. Irrigate planting areas as required to insure active growth keeping areas moist but not saturated. Regulate irrigation as necessary to avoid erosion and gullyng.
3. Fertilize as needed in accordance with the manufacturer's recommendations and five days prior to final inspection. Exercise proper caution and take measures necessary to avoid plant burn.

4. Keep planting areas free of weeds and undesirable grasses through daily weeding if required. Remove the entire root system. Dispose of all weeds in appropriate trash containers.

5. Inspect all plants for disease or insect damage weekly. Treat affected material immediately.

6. Remove damaged or diseased growth from trees and shrubs. Treat cuts larger than 4" diameter with specified tree paint.

7. Immediately remove any dead or dying plants not in a vigorous thriving condition. Replacement shall be the same species and size as originally planted.

8. Restake, tighten, repair, and reset to proper grades or upright position any plants that are not in their proper growing position.

9. As it becomes evident that certain groundcovers have not uniformly or properly established, replant the areas immediately with the same plants and quantity as specified for the initial planting and maintain as specified for 90 percent coverage of healthy, actively growing groundcovers for approval during the final inspection.

* END OF SECTION *
SECTION 02870 - SITE FURNISHINGS

PART 1 - GENERAL

1.01 DESCRIPTION OF WORK

A. The general provisions as specified in Section 01010 are a part of this Section and is incorporated herein.

B. Work Included: Furnishing and installing all exterior site furniture including picnic tables, barbecue grills and related work.

1.02 RELATED REQUIREMENTS

A. Section 02480 - Landscape Planting

B. Related work by others:
   1. Earthwork and drainage by Civil.

1.03 SUBMITTALS

A. Product data, samples, testing data, and shop drawings required.

PART 2 - PRODUCTS

2.01 MATERIALS

A. Picnic Tables as manufactured by Iron Mountain Forge, Farmington, Missouri 63640, phone (314) 756-4591, Model No. 238-86T or approved equal.

B. Barbecues as manufactured by Iron Mountain Forge, Farmington, Missouri 63640, phone (314) 756-4591, Model No. 210 or approved equal.

PART 3 - EXECUTION

3.01 INSTALLATION

A. Locate picnic tables and barbecue grills within central open area as shown on plans and provide concrete footing as required.

B. Pitch finished grade beneath so as not to accumulate water.

* END OF SECTION *

726CS_4_.W51

TEMPORARY HOUSING FOR THE HOMELESS

Site Furnishings 02870-1
SECTION 02513 - ASPHALTIC CONCRETE PAVING

1.01 Provide asphaltic concrete paving as indicated, including:
   A. Final preparation of subgrade.
   B. Soil sterilization of area to be paved.
   C. Aggregate base course.
   D. Asphalt surfacing material.
   E. Placing asphaltic concrete.

1.02 Standard specifications for Public Works Construction of the City & County of Honolulu shall apply except measurement and payment.

2.01
   A. Weed killer "Polybor - Chlorate".
   B. Aggregate base course - 6".
   C. Asphalt surface pavement - 2".

SECTION 02444 - CHAINLINK FENCE

1.01 Provide chain link fence and gates, complete with required items as indicated.

2.01 Fence fabric shall be No. 9 W&M gauge, 2" mesh, conforming to ASTM A392, hot dip galvanized. Top and bottom selvages to twisted and knuckled.

2.02 Posts shall be Schedule 40 or Tuf 40, hot dip galvanized, 2" diameter with galvanized malleable cast iron eye tops.

2.03 Set posts in concrete.

2.04 Top and bottom rails shall be Schedule 40, 1-5/8"d, 2.27 lb./lf.

2.05 Gates shall be welded construction with catch, stops, hinges, padlocking mechanisms and center rest. Padlock by others.
3.0 INSTALLATION
   A. Install at location indicated.
   B. Posts shall be plumb, in-line and rigidly set in concrete. Provide bracing as necessary.
   C. Install fabric.

SECTION 03100 - CONCRETE
1.01 Provide all concrete work including:
   A. All formworks, reinforcing mesh and steel.
   B. Concrete placement and finishing.
   C. Installation of anchors, plates, slabs, etc.

2.01
   A. Concrete: Ready-mixed per ASTM C-94, maximum 4" slump; 2,500 psi at 28 days, per ACI 301 and 318.
   C. Cold joint - Burke keyed kold joint.
   D. Expansion joint. Burke Fiber E.J., 1/2" thick.

3.01
   A. Set formwork per ACI 347.
   B. Place reinforcement per CRSI 63.
   C. Deposit continuously or provide construction joints per ACI 309.
   D. Deposit near final location to avoid segregation due to handling.

3.02 SLAB FINISH
   A. Trowelled Finish for surfaces to receive floor covering or carpet.
   B. Broom Finish - Exterior slabs except lanai and patio.
3.03 CURING
   A. Water cure or use curing compounds.

3.04 CLEANING
   A. Remove all excess concrete from site.

SECTION 06100 - ROUGH CARPENTRY

1.01 WORK
   A. Complete all rough carpentry work as indicated or required. Work shall include layout, sills, posts, studs, floor framing, beams, plates, blocking, and backing, roof framing, rafters, ridge, fascia, plywood siding, and plywood roof deck, and other items as required.
   B. All lumber and plywood to be preservative treated per Section 06311.

2.01 MATERIALS
   A. Framing Lumber: Douglas Fir or Hem/Fir, nominal dimensions, S4S, WWPA grading:
      1. Studs - "Stud" or "Standard" - (10 feet maximum).
      2. Light Framing - "Standard" (posts).
      3. Structural Joists, Rafters, Beams - No. 2 or better (joists, rafters, beams, stringers).
   B. Plywood
      1. Roof sheathing: APA rated sheathing, 32/16, 5/8", exposure 1, exterior glue.
      2. Subfloor: APA Sturd-1-Floor, 24" o.c., 3/4", exposure 1, exterior glue.
   C. Related Materials
      1. Rough Hardware – nails, bolts, screws, etc. -- hot-dip galvanized.
2. Framing Accessories - Simpson "Strong Tie" or "Silver", galvanized.


4. Foundation Blocks -- precast pyramid concrete footing blocks as detailed.

3.0 EXECUTION

A. Nailing: Per UBC 1988, as amended by City & County of Honolulu.

B. Framing shall be plumb, in line, straight, and braced as necessary.

C. Provide anchorage to foundations as indicated to preclude uplift due to wind load.

D. Remove all debris from upon completion of subcontractor's work.

SECTION 06200 - FINISH CARPENTRY

1.01 WORK

A. Furnishing and installing of finish carpentry, millwork, and related items.

B. Install exterior and interior trims, caps, etc.

C. Install:
   1. Wood Door Frames
   2. Finish Hardware
   3. Bath Accessorries
   4. Manufactured Cabinets
   5. Provide all rough hardware

2.01 MATERIALS

A. Wood trim - Douglas Fir, S4S - "Standard" or better.

B. Nails, bolts, screws: steel, galvanized.

C. Door frame for prehung doors: Clear Douglas Fir.
3.01 INSTALLATION

A. Install items plumb, level, square, true to line, securely anchored.
B. Nails and screws, neatly set.
C. Exterior trim to be secured with common nails, head flush with surface, suitable for finishing.
D. Interior trim to be secured with finishing nails.
E. Set pre-hung door frames plumb, in line and firmly anchored.
F. Install finish hardware.
G. Install manufactured cabinets level, plumb, and securely anchored.

3.02 CLEANING

A. Remove rubbish and debris daily.
B. Clean-up area after completion.

SECTION 06311 - PRESERVATIVE TREATMENT OF WOOD

1.01 Provide preservative treatment of all wood used in project.
   A. Comply with "AWPB Approval" requirement and "AWPB LP-2" for plywood.
   B. Use Wolman CCA or OSMOSE CCA system.

SECTION 07310 - COMPOSITION SHINGLE ROOFING

1.01 WORK
   A. Provide asphalt shingle roofing as indicated and specified herein.
   B. Sheet metal work is specified in Section 07600.
   C. Vent Pipe flashing in Section 15400.

2.01 MATERIAL
   A. U/L Class A, 20-year warranty, asphalt shingles.
   B. Firescreen Brigade or Genstar "Sentinel" or similar.
C. Underlayment: #15 lb. asphalt felt.
D. Fasteners - Hot-dip galvanized steel 10-1/2 to 12 gauge, 3/8" min. diameter head, of sufficient length.
E. Plastic Cement: Bituminous product, designed for roofing applications.

3.01 INSTALLATION
A. Verify that roof sheathing has been properly installed, smooth, clean and suitable to receive shingle.
B. Apply roofing felt.
C. Install shingle strictly in accordance with manufacturer's directions.
D. Roofing shall be done by experienced workmen, approved by manufacturer.

3.02 CLEANING
A. Remove all excess shingles and debris.
B. Replace all damaged or improperly applied shingles.

SECTION 07600 - SHEET METAL WORK

1.01 WORK
A. Supply and install sheet metal flashing and related items indicated or required.

2.01 MATERIALS
A. 26 gauge galvanized steel sheet.
B. Solder: 50% lead and 50% block tin.
C. Flux: Muriatic acid.

3.01 INSTALLATION
A. Install work watertight.
B. Allow for expansion.
C. Hem all edges.
D. Conform to SMACNA recommendations and details.
E. Lap vertical joints 3" minimum and apply sealant. Cleat folded drip edges.

3.02 CLEANING
A. Leave work clean and free of scraps and debris.

SECTION 07200 - SEALANTS

1.01 WORK
A. Provide sealant at joints as indicated or required.

2.01 MATERIALS
A. Exterior - "Sikaflex-1a" by Sika Inc., "Dynamic" by Tremco, or similar.
B. Back-up material - fiberglass or polyurethane foam.

3.01 INSTALLATION
A. Verify that surface to receive sealant is free from dust, oil, grease, etc.
B. Apply primer as recommended by manufacturer.

3.02 CLEANING
A. Clean surfaces of excess sealants.

SECTION 08200 - WOOD DOORS

1.01 WORK
A. Provide wood doors as indicated and specified herein.
B. Installation in Section 06200 - FINISH CARPENTRY.
C. Finish hardware in Section 08710.
D. Panting in Section 09900.

1.02 Furnish 1 year written warranty.

2.01 DOORS
A. All doors must be shop fabricated by a recognized manufacturer.
1. Exterior Doors: Solid core, flush panel; Lauan Mahogany Veneer, filled and primed; custom grade, 1-3/4" thick.
2. Interior Doors: Hollow core, flush panel, Lauan mahogany veneer, filled and primed.

3.01 Fabricate in accordance with Industry Standard 1-76 or Commercial Standard CS171.
3.02 Doors may be prehung at option of Contractor.

SECTION 08527 - JALOUSIES

1.01 Provide jalousies as indicated.

2.01 PRODUCTS
   A. Jalousies shall be International Windows Corp., Series 600 or equal, nail on type.
   B. Aluminum shall be natural aluminum, anodized.
   C. Glazing 3/16" x 4" glass, clear or obscure as scheduled.
   D. Hardware - factory lubricated rate - type.
   E. Screens: Fiberglass in rolled formed aluminum frame.

3.01 INSTALLATION
   A. Install level, plumb, and square without distortion.
   B. Properly caulk around frame to preclude leaks.

SECTION 08710 - FINISH HARDWARE

1.01 WORK
   A. Provide finish hardware as scheduled.
   B. Installation in Finish Carpentry section.
   C. Provide 4 keys per lock.
D. Hardware Schedule

HW-1

Typical Single Entry

| 1 1/2 pr. | Butts | RD741 4X4 | P | Stanley McKinney |
| 1          | Lockset | F51N ORB | 626 | Schlage |
| 1          | Stop    | SP7071   | 626 | Stanley |
| 1          | Threshold | 206 AV x length | ANOD | Peako |

Typical Interior Doors

| 1 pr. | Butts | RD741 3-1/2x3-1/2 | Stanford McKinney |
| 1     | Privacy | F40N ORB | 626 | Schlage |
| 1     | Stop    | SP7092   | 626 | Stanley |

SECTION 09650 - RESILIENT FLOORING

1.01 Provide resilient flooring and base.

2.01 MATERIALS

A. "Valuflor" by Congoleum, no wax sheet vinyl or equal.
B. Vinyl Base: 2-1/2" x 1/8" coved base, Kentile or equal.
C. Edge strip: 1/8" thick, homogeneous vinyl composition, bullnose edge.
D. Color to be selected from manufacturers standard samples.
E. Adhesive - waterproof stabilized type as recommended by the flooring manufacturer.

3.01 INSTALLATION

A. Verify that subfloor is properly installed without roughness, indentations and protrusions.
B. Remove dust, oil, etc. from surface.
C. Install flooring in strict accordance with manufacturer's printed instructions.
D. Installation by experienced workmen.
3.01 CLEANING
A. Remove all debris and rubbish.

SECTION 09000 - PAINTING

1.01 Complete preparation, painting, staining, and finishing of interior and exterior surfaces and materials as indicated as scheduled.

2.01 MATERIALS
A. First quality materials from established manufacturers as approved may be used.

3.01 EXECUTION
A. Verify that surfaces are properly prepared, clean, dry, and free from oil, grease, etc. before starting.
B. Remove cover plates, light fixtures, etc. before painting.
C. Application shall be experienced skilled workmen. Spread evenly without skips, sags, runs, drips, etc.

3.02 PAINTING SCHEDULE
A. Exterior
1. Plywood Siding: 1 coat exterior primer 1 coat acrylic flat enamel
2. Wood Door and Trim: 2 coats acrylic enamel, semi-gloss
3. Ferrous Metal: 1 coat rust inhibiting primer 1 coat acrylic enamel glossy
4. Galvanized Steel: 1 coat galvanized metal primer 1 coat exterior enamel glossy

B. Interior - (Painting limited to interior of Bathrooms and wall above Kitchen Counter only)
1. Bathrooms and Kitchen Walls: 1 coat interior undercoat 1 coat interior alkyd semi-gloss
2. Bathroom Door: same as above
3.03 CLEAN-UP
   A. Remove all unused materials, empty containers, etc. at completion.
   B. Remove splattered paint, spills, and drips.
   C. Reinstall items removed for painting.
   D. Touch-up paint.

SECTION 10800 - BATH ACCESSORIES*

1.01 WORK
   A. Provide bath accessories as listed.
   B. Installation under Finish Carpentry.

2.01 ACCESSORIES LIST (All Chrome Plated)
   C. Soap Dish: Nutone HM-822.
   D. Robe Hook: Nutone HM-881.

SECTION 11450 - APPLIANCES

1.01 Provide and install appliances as listed:

2.01 APPLIANCES*
   A. Refrigerator: 6.0 cubic feet, under counter. Acme BA603 or equal with enamelled metal finish on door, color white. (23-1/2"W x 34-1/2"H x 24"D)
   B. Microwave Oven: Whirlpool MW2500XS 0.8 cubic feet, 99 min./99 sec. timer, midsize, 10 level cook control, 650 watts cooking power.
   C. Washers: GE WWA 7050G, large capacity with variable water levels, 4 wash cycles or equal.
D. Dryers: GE DDE5700G, standard capacity, 125 minutes Time Control porcelain enamel drum, or equal.

*Items listed are to set standard only.

SECTION 12300 - KITCHEN CABINET

1.01 Provide kitchen cabinet as indicated and specified herein.
1.02 Provide shop drawings indicating material, finish, hardware, and fabrication details.

2.01 PRODUCT
A. Cabinet shall be Diamond "Rogue", or equal, economy type.
B. Cabinet doors shall be made of 5/8" medium density fiberboard faced with light finish wood grain polyester, with beveled edges covered with wood grain laminate.
C. Interior shall be covered with wood grain laminate.
D. Provide manufacturer's standard drawer guide and hinges.
E. Countertop and splash shall be manufacturer's standard economy type with coved back and anti-drip front. Plastic laminate color shall be selected from manufacturer's standard samples.
F. Installation included in Section 06300 - Finish Carpentry.

SECTION 15400 - PLUMBING

1.01 WORK
A. Provide complete plumbing system as indicated on the drawings and specified herein, including: Excavation, backfill, sewer line, water service, furnishing and installing of kitchen sink, hot water heater, shower stalls with all faucets, trim, accessories, and all other items required for a complete and workable installation.

1.02 All work shall be completely installed and tested as required by the plumbing code.

1.03
A. Provide shop drawings if required for building permit.
B. Provide catalog cuts of:
   1. Plumbing fixtures and trim.
   2. Shower stalls.

1.04 Provide 1 year guaranty against all defects in material on workmanship.

2.01 MATERIALS
   A. All materials shall be new, free from defects, complying with applicable codes, and standard.
   B. Waste and vent piping:
      1. Lateral riser to grade: 4" No-hub system.
      2. Soil waste and vent: ABS pipe and fittings.
   C. Water Piping
      1. "Quest" polybutylene by U.S. Brass with Quicksert I or II connections.
      2. Service lines which exceeds 75 feet from meter to house shall be increased by 1".
   D. Provide cleanouts as required.
   E. Air Chamber: Provide air chamber at each water branch to a plumbing fixture, extending 12" minimum above fixture outlet.
   F. Valve:
      1. Gate valve at meter and at water heater shall have operating pressure of 125 p.s.i.g.
      2. Pressure reducing valve #600 by Wilkins or Watt USB.

2.02 PLUMBING FIXTURES
   A. Water Closets
      Norris 516 (28-1/2" height) round front, 1.5 gal. flush, reverse trap closet, with matching Olsonite plastic seat. Provide flush/lever mechanism, and all fittings required. Color: White/Chrome.
B. Kitchen Sink

Elkay PSR-1517, 15" x 17-1/2" single compartment self-rim sink, 20 ga. undercoated stainless steel, 3 faucet holes, LK-15 duo strainer.

Price Pfister 35-021, 9" tubular spout, metal verb handles, plus all required supplies, P-trap, etc.

C. Shower Stall

Mustee "Durastall" Model 82, 32" x 32", fiberglass free standing stall complete with molded fiberglass reinforced non-slip shower floor with PVC floor drain assembly for 2" ABS sanitary drain pipe. Color: Bone White.

D. Shower Fittings: Price Pfister 01-911 tub shower combination less tub filler, polished chrome.

E. Laundry Tray

Flat FL-6 or equal, single compartment, with tapered metal legs with Price-Pfister 71-221 faucet, and all required trap and fittings.

F. Water Heater:

1. Heater: ASHRAE approved, State Industries or equivalent Underwriter's Laboratories approved heaters as manufactured by A.O. Smith, National, or Ruud.

   All heaters shall be manufactured with a glasslined tank tested to 300 psi pressure, baked enamel steel jacket, thermostat, inlet and outlet connections and bottom valved drain. Heaters shall meet the requirements of ASHRAE 90A-1980 standard for energy efficiencies.


3. Vacuum Breaker and Relief Valve: Provide a Watts No. 36A vacuum breaker on cold water inlet and Watts No. 100XL temperature and pressure relief valve on each water heater.

G. Hose Bibb: Arrowhead 251-1/2" no hose kink faucet, with Watts 8A non-removable type backflow prevention device.
SECTION 16050 - ELECTRICAL WORK

PART 1 - GENERAL

1.01 DESCRIPTION

A. Work

1. The work under this Section of the Specifications includes all labor, materials, equipment and services necessary to complete electrical work as shown on the Drawings and herein specified including, but not limited to:

a. Electrical services.
b. Meter centers.
c. Feeders and load centers.
d. Branch circuits, devices and luminaires.
e. Empty telephone system.
f. Equipment connections.
g. Record drawings.

B. Items of electrical equipment not furnished in other Sections of these Specifications, but necessary for a complete plant, shall be provided as part of the electrical work.

C. Related Work

1. Painting in PAINTING Section.

1.02 RELATED REQUIREMENTS

A. See DIVISION 1 - GENERAL REQUIREMENTS.

1.03 RULES AND REGULATIONS

A. The entire installation shall be made in compliance with the applicable provisions of the latest edition of the National Electrical Code, local Ordinances, Rules and Regulations of the Building Department. Permit charges shall be included in the bid. Obtain the electrical permit as required by local laws or rules. Arrange for periodic inspection by the local authorities as work progresses so that certificates of completion and inspection may be turned over to the Architect on the day scheduled for final inspection.
1.04 GUARANTY AND STANDARDS

A. Guaranty all items of material and workmanship for a period of one year from the date of final acceptance by the Owner. Items requiring regular replacement after normal use, such as lamps, shall be guaranteed for 50% of their rated life.

B. All materials shall be new, code-gauged and sized, and shall bear the UL label of approval for all items where standards have been established and label service is regularly furnished.

1.05 SUBSTITUTION

A. Comply with requirements of SUBMITTALS AND SUBSTITUTIONS Section.

B. Pre-approved apparatus manufacturers are General Electric, Westinghouse, Square D Co., ITE, and Cutler Hammer.

C. Submit shop drawings and manufacturer's literature including catalog cuts for Architect's review and acceptance for:
   1. Lighting fixtures.
   2. Meter Centers, panelboards, breakers, switches.
   3. Time switch.
   5. Cabinets, gutters.

D. Request for substitution must be received by the Architect no later than ten (10) calendar days prior to bid opening. Refer to Section 01340 - SUBMITTALS AND SUBSTITUTIONS for further information.

1.06 DRAWINGS

A. These Specifications are accompanied by floor plans of the building, architectural sections and elevations indicating locations of all outlets, switch control, and other electrical apparatus. These locations are approximate and before installing, study the adjacent architectural details and actually make the installation in the most logical manner. Any outlet may be relocated within 10 ft. before installation at the direction of the Owner without additional cost to the Owner. The layout is generally diagrammatic. Coordinate the installation of wiring runs, outlets, control devices, and power units as permitted by structural conditions and appropriately locate these units.
B. Record plans consisting of one set of sepias and one set of prints shall be submitted in accordance with General Conditions. The Drawings and Specifications are complimentary, each to the other, and what is called for by one shall be as binding as if called for by both.

1.07 PRODUCT HANDLING

A. Take all means necessary to protect installed and stored materials from physical damage, corrosion, construction debris, and vandalism. No metallic conduit, apparatus, luminaires, wiring devices, and other construction material shall be stored in the open. All installed conduit, outlet boxes, and panelboard interiors shall be protected at all times against construction debris and water. All materials damaged or rusted in any way shall be removed from the job and replaced with new materials of equal quality at no cost to the Owner.

PART 2 - PRODUCTS

2.01 ELECTRICAL SERVICE CONDUIT

A. Furnish PVC Schedule 40 conduit from Hawaiian Electric Co. service to meter center and from meter center to loadcenters. Burial shall be minimum 18". Trenching and backfilling per Hawaiian Electric or as indicated.

B. Telephone Raceways: 3/4" empty minimum Schedule 40 raceways for telephone. Wire from junction box to locations as indicated on Drawings. Provide outlet boxes with telephone type cover plates.

C. Underground Handholes/Pullboxes: Handholes/pullboxes shall consist of precast concrete sides and either precast concrete cover (electric) or steel plate (telephone and television).

2.02 WIRING SYSTEM

A. NEC type NM cable shall be used for all branch circuiting installed in furred ceilings and drywalls. All cable runs through wood studs shall be run in the center of the stud. Notching is not permitted. BX cable is not acceptable.

B. Exterior feeders shall be 600V, NEC type THW-USE or XLP-USE. Exterior branch circuits shall be type XHHW or THHN.

C. Non-metallic outlet boxes shall be used for all NM cabling. Boxes must be of sufficient depth to accommodate all the conductors without overcrowding.
D. Wiring splices for cabling system shall be made with UL listed, copper crimp connectors, taped with plastic electrical tape. Wiring splices for conduit system wiring shall be made with solderless pressure type wire nuts. All wiring splices shall be made in appropriate locations, such as junction boxes.

E. When a branch circuit exceeds 70 ft. total length (one way) conductor sizes shall be increased one wire size.

2.03 OUTLETS AND WIRING DEVICES

A. Switches: 15 A, 120/277 V, quiet-type non-mercury, residential grade.

B. Receptacles: 15 A, grounding-type, 2-pole, 3-wire, residential grade.

C. Weatherproof Receptacles: 15 A, grounding-type duplex receptacle with gasketed spring-loaded cover plates. Bell #1960 or equal.

D. Ground Fault Interrupter Receptacles: Feed-through type, duplex, with test button, 5 ma pick-up, GE "GTR" or equal.

E. Device Cover Plates: Smooth plastic, Ivory, Sierra Co. Gangs as required.

F. Telephone Outlets: One-gang boxes with single-gang cover with bushed hole.

G. Outlets for luminaires shall be minimum 4" octagon by 1-1/2" deep.

H. Switch and receptacle boxes, gangs as required, 1-1/2" deep.

I. All surface boxes and boxes exposed to the weather shall be cast with gasket.

J. Smoke Detectors: UL listed, Nutone S-180 or approved equal.

2.04 LUMINAIRES

A. Luminaires shall be provided complete with lamps. Fluorescent units shall have protected HPF ballasts with CBM and ETL labels. Where luminaires are installed outdoors, a gasket shall be provided between the outlet box and the fixture and also between the fixture hood and the globe or enclosure.
2.05 METER AND MAIN BREAKER

A. Meter sockets shall be weatherproof, surface mounted, and approved by the utility company.

2.06 LOAD CENTERS

A. Panelboards shall be as indicated, single phase, 3WSN application, one handle for multi-pole, 10,000 AIC interrupting rating, copper bussed, flush load centers, with doors and trims and typed circuit directory. Half width breakers not permitted. Westinghouse, Square D, General Electric, ITE, or approved equal.

Aluminum bussing may be used in place of copper.

PART 3 - EXECUTION

3.01 WORKMANSHIP

A. All electrical work shall be neatly executed, workmanlike in appearance, symmetrical, plumb, uniform, properly aligned, and firmly secured in place. Dimensions and locations shown on the Drawings shall be verified in the field. Discrepancies and interferences with other work shall be immediately called to the attention of the Architect and corrections or adjustments shall be made as he directs. All cutting and patching necessary for electrical work shall be done by artisans skilled in the trade.

3.02 GROUNDING

A. The neutral of the a.c. system and all metallic equipment and enclosures for conductors shall be grounded at the service locations. The grounding conductor shall be in a rigid metal conduit which shall serve as the equipment and enclosure ground. Both conductor and conduit shall be connected to the nearest cold water pipe that is part of a continuous metallic underground water piping system, with a clamp specifically designed and approved for the purpose. Duplex receptacles grounded to grounding system with jumper wire.

3.03 TESTING AND COMPLETION

A. Provide the personnel and equipment to perform the following tests:
1. Insulation resistance tests in accordance with NEC Section 110-20, using a 500-volt megger. A record of the readings shall be submitted to the Owner for approval. Correct any defects.

2. Reconnect subfeeders at the meter centers as required until a nearly perfect balance is obtained on the single-phase, 3-wire, power supplies.

3. Request final inspection of the system by the local inspector. Test circuits and equipment for proper operation.

4. The entire electrical and auxiliary systems shall be in good working condition upon acceptance by the Owner.

5. Contractor shall test all smoke detectors for proper sensitivity, common alarm, and voltage stability.

*****