

1996-09-23-0A-FA-Waikele Fire Station

SEP 23 1996

**FILL COPY**

ENVIRONMENTAL ASSESSMENT

WAIKELE FIRE STATION

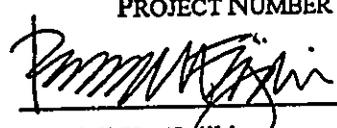
NOTICE OF DETERMINATION  
AND  
FINAL ENVIRONMENTAL ASSESSMENT

**WAIKELE FIRE STATION**  
ENGINE COMPANY NUMBER 42

WAIKELE, OAHU, HAWAII

*Prepared for*

CITY AND COUNTY OF HONOLULU BUILDING DEPARTMENT  
PROJECT NUMBER IX-1-97-C

Responsible Official: 

Date: SEP 06 1996

Randall K. Fujiki  
Director and Building Superintendent

*Prepared by*

 **DAMES & MOORE**  
JOB NUMBER 04402-150-053

SEPTEMBER 10, 1996

NOTICE OF DETERMINATION  
FINDING OF NO SIGNIFICANT IMPACT (FONSI) FOR THE PROPOSED  
WAIKELE FIRE STATION

A. Proposing Agency

Building Department, City and County of Honolulu

B. Accepting Authority

Not applicable to a FONSI.

C. Description of the Proposed Action

The City and County of Honolulu, Building Department proposes to construct a new fire station in Waikele, Oahu using County land and funds.

D. Determination and Reasons Supporting the Determination

The proposed project would not have a significant effect on the environment and therefore preparation of an environmental impact statement is not required. The "Significance Criteria," Section 12 of Hawaii Administrative Rules, Title 11, Chapter 200, "Environmental Impact Statement Rules," were reviewed and analyzed. Based on the analysis, the following were concluded:

1. *No irrevocable commitment to loss or destruction of any natural or cultural resource would result.* There are no significant natural resources which would be affected by the proposed project.
2. *The action would not curtail the range of beneficial uses of the environment.*
3. *The proposed action does not conflict with the state's long-term environmental policies or goals and guidelines.* The proposed action would have no significant negative impacts. Temporary impacts associated with construction can be adequately mitigated. The proposed action would be supportive of other state goals and guidelines relevant to public health & safety.
4. *The economic or social welfare of the community or state would not be substantially affected.* The proposed project would provide short-term economic benefits in the form of engineering and construction jobs, and long-term social and economic benefits to nearby residents through the protection against loss of life and property due to fire.
5. *The proposed action will have a beneficial impact on public health.*

6. *No substantial secondary impacts, such as population changes or effects on public facilities, are anticipated.* The need for the new station is a result of population changes in the Waikele area. No long-term effects are expected on any public facilities.
7. *No substantial degradation of environmental quality is anticipated.* The proposed action is expected to result in minor short-term increases in noise, emissions of air pollutants from mobile sources, and traffic congestion in the immediate area of construction.
8. *The proposed action does not involve a commitment to larger actions, nor would cumulative impacts result in considerable effects on the environment.*
9. *No rare, threatened or endangered species or their habitats would be affected.* The project site is in a developed commercial and residential community. No protected species or important habitats are known to exist in the project area.
10. *Air quality, water quality or ambient noise levels would not be detrimentally affected.* Operation of heavy equipment and other vehicles associated with the construction would temporarily elevate ambient noise and concentrations of exhaust emissions in the immediate vicinity of the site. There will be no long-term impacts to water or air quality. Ambient noise levels will be impacted by the fire fighters' outdoor recreational activities, but the impacts will be similar to that of a park or school playground. There will be sirens associated with emergency response, but these noises are occasional and exempt from noise regulations in the interest of public safety.
11. *The project would neither affect environmentally sensitive areas, such as flood plains, tsunami zones, erosion-prone areas, geologically hazardous lands, estuaries, fresh waters or coastal waters, nor be likely to suffer damage by being located in an environmentally sensitive area.* The site is not in an environmentally sensitive area. Geotechnical engineering studies have determined there are no geological hazards associated with construction or operation of the facility and there will be no impact to surface water. Erosion control measures will be employed during construction and are incorporated into the fire station design.
12. *The project will not affect scenic vistas or viewplanes that are identified in County or State plans or studies.*
13. *The fire station will not require substantial energy consumption.*

**E. Supplementary Information**

The Final Environmental Assessment (EA) for the Waikēle Fire Station Project and comments received on the Draft EA are attached to support the determination of a Finding of No Significant Impact.

**F. Name, Address and Phone Number of Contact Person**

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

Clifford Lau, (808) 527-6373

**RESPONSIBLE OFFICIAL**

  
\_\_\_\_\_  
Randall K. Fujiki  
Director and Building Superintendent

SEP 06 1996

Date

**SUMMARY INFORMATION**

**PROJECT:** Waikele Fire Station

**PROJECT LOCATION:** 94-840 Lumiaina Street  
Waikele, Oahu

**TAX MAP KEY:** 9-4-07:75

**PROPOSING AGENCY/  
ACCEPTING AUTHORITY:** Building Department  
City and County of Honolulu  
650 South King Street  
Honolulu, Hawaii 96813

**AGENCY CONTACT:** Mr. Clifford Lau  
Telephone: 527-6373  
FAX: 523-4567

**SITE AREA:** 0.67 acres, approximate

**STATE LAND USE DESIGNATION:** Urban District

**DEVELOPMENT PLAN:** Central Oahu, Waikele Planned Community  
**Land Use Map Designation:** Park  
**Public Facility Map Designation:** Fire Station

**ZONING:** P-2, General Preservation

**CURRENT LAND USE:** Vacant

**LAND OWNER:** City and County of Honolulu

**ENVIRONMENTAL CONSULTANT:** DAMES & MOORE  
1050 Queen Street, Suite 204  
Honolulu, Hawaii 96814  
Attention: Faith Caplan  
Telephone: 593-1116 ext.38  
FAX: 593-1198  
email:hon@dames.com

Printed on Recycled Paper

## TABLE OF CONTENTS

	Page
SUMMARY INFORMATION .....	iv
TABLE OF CONTENTS .....	v
1.0 INTRODUCTION .....	1
2.0 STATEMENT OF PROJECT PURPOSE AND NEED .....	1
3.0 PROJECT DESCRIPTION .....	3
3.1 SITE LOCATION .....	3
3.2 EXISTING SITE CONDITIONS .....	3
3.3 REQUIRED FACILITIES .....	4
3.4 CONSTRUCTION SCHEDULE AND COST .....	4
3.5 WORKFORCE AND OPERATIONS .....	6
4.0 ALTERNATIVES CONSIDERED .....	6
5.0 AFFECTED ENVIRONMENT, POTENTIAL IMPACTS, AND MITIGATION MEASURES .....	7
5.1 AIR QUALITY .....	7
5.2 AMBIENT NOISE .....	8
5.3 TOPOGRAPHY, GEOLOGY, SOILS, AND CLIMATE .....	8
5.4 WATER RESOURCES .....	10
5.5 BIOLOGY .....	11
5.6 AESTHETICS .....	11
5.7 ARCHAEOLOGICAL AND CULTURAL RESOURCES .....	12
5.8 LAND USE .....	13
5.9 SOCIO-ECONOMIC .....	13
5.10 INFRASTRUCTURE AND PUBLIC SERVICE .....	14
5.11 HAZARDS .....	15
5.12 TRAFFIC .....	16
6.0 RELATIONSHIP OF THE WAIKELE FIRE STATION TO GOVERNMENT LAND USE PLANS .....	17
6.1 STATE LAND USE DISTRICT DESIGNATION .....	17
6.2 STATE COASTAL ZONE MANAGEMENT PROGRAM .....	17
6.4 CENTRAL OAHU DEVELOPMENT PLAN .....	19
6.5 COUNTY ZONING .....	19
7.0 REQUIRED PERMITS AND APPROVALS .....	19
8.0 FINDINGS AND CONCLUSIONS .....	20
9.0 REFERENCES .....	22
10.0 CONSULTATION .....	23

10.1 PRE-EA CONSULTATION ..... 23  
10.2 DRAFT EA REVIEW ..... 24

**FIGURES**

Figure 1: Location and Vicinity Map ..... 2  
Figure 2: Site Plan ..... 5

**TABLES**

Table 1: Summary of Adverse Environmental Impacts ..... 21

## 1.0 INTRODUCTION

The City and County of Honolulu Building Department proposes to construct a new fire station on a County-owned parcel in Waikele, Oahu, Hawaii (Tax Map Key: 9-4-07:75). A location and vicinity map is attached as Figure 1. Pursuant to Chapter 343, Hawaii Revised Statutes, and Chapter 200 of Title 11, Administrative Rules, *Environmental Impact Statement Rules*, the proposed use of County funds or land requires documentation of the project's potential environmental impacts. This Final Environmental Assessment (EA) was prepared according to the aforementioned statute and rules, and describes the proposed project, existing environmental conditions, potential short- and long-term environmental impacts resulting from the project, and mitigation measures which will be employed to minimize potential adverse impacts.

The City and County of Honolulu Fire Department is committed to providing effective fire protection services to the people of Oahu. The new fire station is important to the public health and safety of the Waikele community and adjacent areas. The facility is not anticipated to cause significant adverse impacts to the physical, natural, or socio-economic environment. Agency and community input were solicited in preparation of this EA and their comments are addressed herein.

## 2.0 STATEMENT OF PROJECT PURPOSE AND NEED

The Waikele Fire Station, Engine Company No. 42, will improve the County's response time to fire incidents in the proposed primary (first alarm) service area comprised of Waikele and portions of the Waipio-Gentry and Waipahu communities. Currently, Waikele as well as Waipahu, Royal Kunia, Ewa Villages, West Loch, Crestview, and Waipio-Gentry are served by the Waipahu Fire Station. The response time to an incident in Waikele is estimated to be between 8 and 12 minutes, depending on traffic; but will improve dramatically to 4 minutes with the addition of the proposed Waikele Fire Station. Besides the primary service areas of Waikele, Waipahu, and Waipio-Gentry, the new station could respond to multi-company incidents in the neighboring communities of Kapolei, Mililani, Mililani-Mauka, and Pearl City, depending on the magnitude of the incident.

The demand for new fire stations is based on several factors including population density and distance to a potential emergency. The existing Waipahu Fire Station, which houses ladder company No. 12 and engine company No. 12, is operating at maximum capacity, but emergency response times are increasing as the station's service area rapidly increases in size and density. The entire service area of the Waipahu Fire Station lies within the County's Central Oahu Development Plan Area, which experienced a 28.5 percent population increase between 1980 and 1990; and the forecast is for an additional 30.2 percent growth between 1990 and 2010. A 215 percent population increase is expected for the Waikele/Village Park area alone (C&C, 1993).



The Waikele Final Environmental Impact Statement identified a new fire station in Waikele as a necessary community facility to provide adequate fire protection in the project area. During the planning process, the Honolulu Fire Department requested approximately 25,000 square feet be deeded to the County, preferably in the area of the commercial center, for a new fire station site (Environmental Communications, 1986).

### 3.0 PROJECT DESCRIPTION

This section provides information regarding project location, existing site conditions, required facilities and activities, construction schedule and cost, and workforce.

#### 3.1 SITE LOCATION

The 0.67-acre (approximate) site is centrally located within Oahu's Waikele community at 94-840 Lumiaina Street (TMK:9-4-07:75). The City and County-owned parcel is at the intersection of Lumiaina Street and Lumiaina Place (Figure 1). Adjacent land uses include a community park on the eastern boundary; a Board of Water Supply (BWS) facility on the northern boundary; The Parkview at Waikele, a residential community, west of Lumiaina Place; and the Waikele Commercial Center, specifically Office Max, south of Lumiaina Street.

#### 3.2 EXISTING SITE CONDITIONS

Within the past five years, the trapezoidal-shaped parcel was graded and partially landscaped by the Waikele developer. The resulting grade is approximately 5 to 6 feet higher in elevation than the Lumiaina Street sidewalk, and 5 to 7 feet lower than the BWS property. Neither of the steep slopes appear to be intentionally landscaped, and the areas are sparsely vegetated. The northern half of the property was probably cut and the southern half filled to create the existing relatively level building pad (Dames & Moore, 1996). The lot has remained vacant since the grading activities.

There is a hibiscus hedge along the fire station parcel and community park border. A chain-link fence, topped with barbed wire, delineates the perimeter boundary of the BWS facility. Landscaping along the fire station side of the fence successfully obscures the view of the BWS facility from Lumiaina Street. Five young trees are planted along the western and southern boundary of the site, and the ground surface of the entire site is sparsely vegetated.

Lumiaina Place is a two-lane County roadway that terminates approximately 450 feet from Lumiaina Street. A curbed cement sidewalk (4-foot wide) borders the property along Lumiaina Place and street parking is permitted. The pedestrian walkway/bikeway between the site and Lumiaina Street is 18 feet wide and has a 4-foot wide landscaped median strip. Lumiaina Street is a four-lane divided road with a

median strip landscaped with grass, hibiscus, and mature trees. Parking is not permitted along Lumiaina Street.

### 3.3 REQUIRED FACILITIES

The proposed Waikele Fire Station was designed and will be constructed according to Honolulu Fire Department Fire Station Guidelines (1988), County building codes, and the Americans with Disabilities Act Accessibility Guidelines for Buildings and Facilities. The design of the facility was guided by concern for energy efficiency and water conservation. A site plan is included as Figure 2. Ingress and egress from the site will be on Lumiaina Place, and existing street parking will be eliminated to accommodate emergency vehicle traffic. The 5,020 square foot station will consist of a one-story concrete masonry block structure, approximately 30 feet in height. It will house two fire engine bays (referred to collectively as the apparatus room), one officer's and one men's dormitory, a kitchen, a dining/meeting room, lavatories, showers, an exercise room, a laundry room, an emergency generator/mechanical room (no underground fuel lines), a library, and an office.

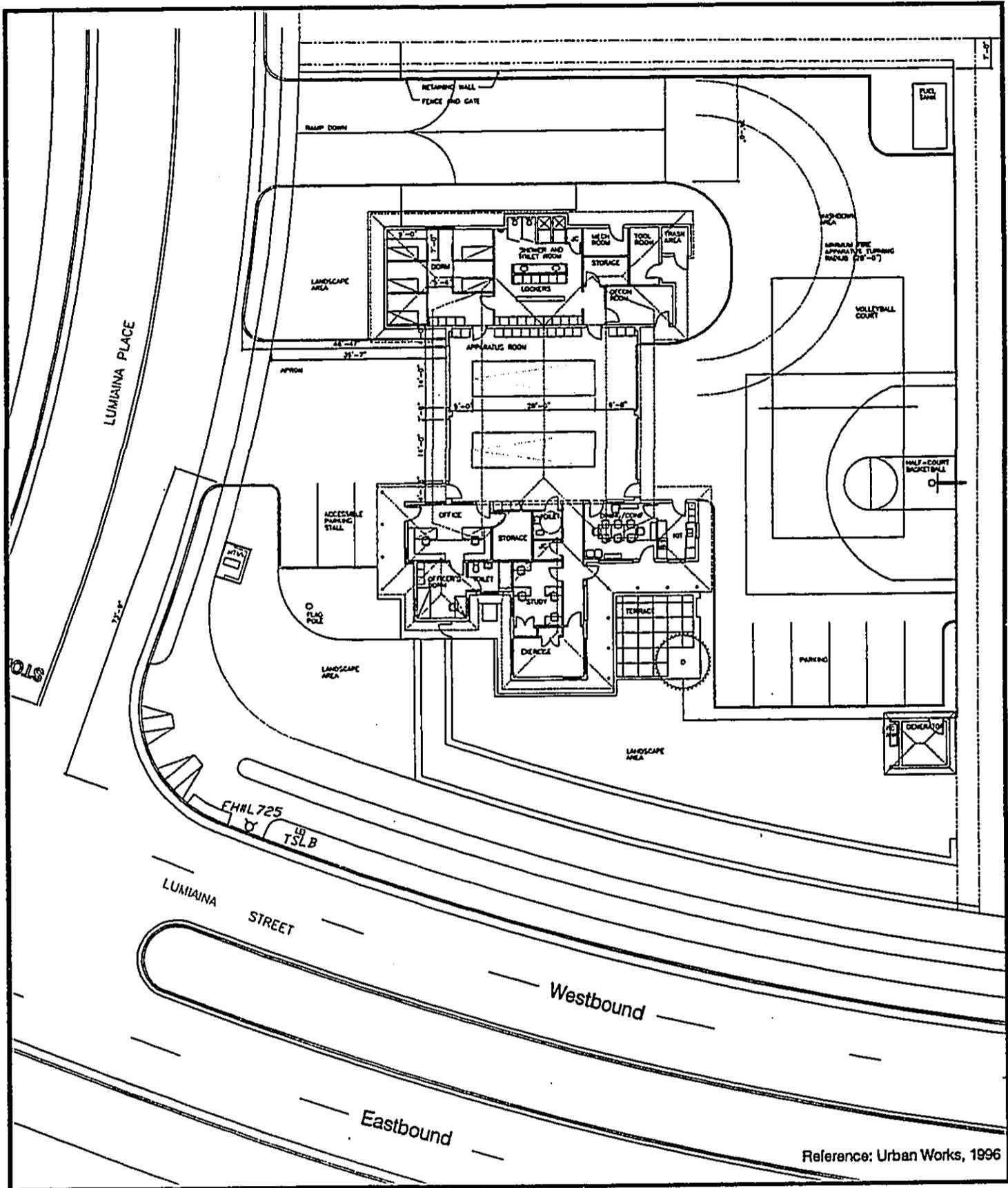
Exterior facilities include a recreation area for volleyball and/or basketball, an uncovered parking area, a vehicle wash area draining to the landscape area, two above-ground storage tanks (500-gallon capacity diesel fuel, and a 250-gallon capacity liquefied petroleum gas (liquid propane) tank for the stove/oven), a fuel dispensing station, perimeter fencing and landscaping (Figure 2).

Additional facilities include warning signals (flashing lights and audible signal) at the intersection of Lumiaina Street and Lumiaina Place, and exterior night lighting. An Emergency Medical Services Unit is not planned for the facility at this time; however, an onsite emergency call button will be accessible to the public.

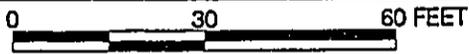
Onsite emergency vehicles will include one fire engine for routine use, and one older fire engine for backup in the event the principal fire engine has mechanical problems.

### 3.4 CONSTRUCTION SCHEDULE AND COST

Construction of the proposed facility will require approximately one year and is scheduled to begin in 1997 subject to agency approvals. The estimated capital cost of construction is \$2.4 million and will be funded entirely by the City and County of Honolulu.



Reference: Urban Works, 1996



### 3.5 WORKFORCE AND OPERATIONS

The proposed facility will operate on a 24-hour-per-day basis with three shifts of five fire fighters. Initially, the Waikele engine company will consist of transfers from other fire stations, until new fire fighter positions are funded. The Honolulu Fire Department has no volunteer fire fighting staff.

In addition to their offsite fire fighting, emergency rescue, and emergency spill response activities, the fire fighters will conduct emergency response drills, maintain their level of physical fitness through exercise, maintain the station, and participate in community activities on-site. The County will finance the operation and maintenance of the facility and the emergency vehicles.

### 4.0 ALTERNATIVES CONSIDERED

This section presents the project and location alternatives that were considered, and describes why they were eliminated from further consideration.

#### The No Project Alternative

The "no project" alternative will maintain current fire protection conditions and capabilities, and will not adequately provide fire protection service to the Waikele Community. This alternative was eliminated from further consideration because it fails to satisfy the need for a higher degree of fire protection for the Waikele community and surrounding areas.

#### Project Alternative

Increasing the staff and equipment at the Waipahu Fire Station was abandoned as a non-viable alternative. The Waipahu Fire Station is currently operating at maximum efficiency and capacity, with no room for expansion. Even if facility expansion was possible, the response time to emergencies in the outlying areas of the expanding service area would not be adequate.

#### Site Alternative

A 20,000 square foot lot located on Managers Drive in Waikele was considered as an alternative site. The Honolulu Fire Department abandoned this site because of inadequate lot size, non-central location, and difficult access on and off freeways to surrounding communities.

## 5.0 AFFECTED ENVIRONMENT, POTENTIAL IMPACTS, AND MITIGATION MEASURES

This section describes the following:

- Existing conditions of the proposed facility location and vicinity
- A description of criteria used to determine if a potential impact would be considered significant
- Potential environmental impacts (beneficial and adverse) of the proposed action during construction (short-term) and operation (long-term)
- Measures recommended for the mitigation of adverse impacts.

### 5.1 AIR QUALITY

#### **Existing Conditions**

The nearest State air monitoring station is in Pearl City, a distance of greater than 5 miles from the proposed fire station. Therefore, the data is not likely to be representative of the site's ambient air quality conditions. The primary source of air emissions in the project area is automobile and light truck traffic, and there are no obvious industrial sources in the vicinity. Ambient air quality is likely to be good as a result of consistent trade winds and low emissions.

#### **Impacts**

Impacts are considered significant if the proposed facility will:

- Result in violations of State or federal air quality standards or will measurably worsen existing violations of these standards.

Construction activities will generate fugitive dust and construction vehicle emissions. The emissions will be minor and of short duration, will not exceed federal or State air quality standards, and will not constitute a measurable contribution to the cumulative pollutant load of the region. Therefore, it is unlikely there will be measurable short-term construction phase impacts to air quality.

Operation and maintenance activities are not expected to result in measurable contributions to area pollutant loads.

#### **Mitigation**

During construction, fugitive dust from exposed soil will be controlled by the contractor through watering or the application of soil tackifier products. Since measurable impacts to air quality are not anticipated, additional mitigation is not required.

## 5.2 AMBIENT NOISE

### Affected Environment

The Parkview at Waikele, the multi-family residential community fronting Lumiaina Place, is the nearest sensitive noise receptor. There are no schools or hospitals in the immediate vicinity.

Noise is defined as unwanted sound. The State of Hawaii Department of Health (DOH) has promulgated administrative rules (Title 11, Chapter 43) known as Community Noise Control for Oahu. In the overriding interest of public safety, emergency vehicles and operations are exempt from compliance; however, noise generated during construction is not exempt.

### Impacts

Impacts are considered significant if the proposed facility will:

- Result in violations of DOH allowable noise levels or permitted noise levels.

Construction activities will occur during weekdays between 7:00 am and 3:30 pm, and daytime construction activities could result in noise levels that exceed 55 db(A), the daytime allowable noise level. Therefore, a noise permit may be required.

The proposed facility would not result in long-term adverse impacts to the acoustic environment. In addition to the occasional noise generated during emergency response, there will be noise resulting from the outdoor recreational activities of the fire fighters. This noise will be comparable to that generated at a park or schoolyard.

The State Department of Health, Noise and Radiation Branch, has received only five complaints in six years regarding fire emergency response noise throughout the State (DOH, 1996).

### Mitigation

Because impacts to the acoustic environment are not anticipated, mitigation is not required; however, the fire fighters' recreation area will be located on the park side of the parcel, away from the residential community, (Figure 2) to minimize the potential impact on neighbors.

## 5.3 TOPOGRAPHY, GEOLOGY, SOILS, AND CLIMATE

### Affected Environment

The parcel is relatively flat, but the topographic gradient of the vicinity is to the south. Geologically, the site is located on the southern slope of the Schofield Plateau. This plateau was formed by numerous successive basaltic lava flows originating from the Koolau Volcano. The rock unit is made up of firm to very hard volcanic rock (Environmental Communications, 1986).

The project area consists of a fill layer ranging from five to seven feet in depth that is underlain by an eight-foot-deep layer of weathered basalt (Dames & Moore, 1996).

The median rainfall of Waipahu is approximately 30.5 inches per year, but the median drops to less than 1.4 inches during the dry season of May through October. The predominant wind is from the north-northeast. The median annual temperature is 83°F.

**Impacts**

Impacts are considered significant if the proposed facility will:

- Result in substantial increase in wind or water erosion of soils
- Expose persons or property to geologic hazards, such as ground failure or landslides.

The proposed facility site has been previously graded, and minimal additional grading or excavation is anticipated. There will be no resultant impact on the topography of the area.

The site will be grubbed and stripped of all vegetation, roots, and debris. Any utility lines will be removed and re-routed. Resulting voids will be backfilled and compacted. A recent geotechnical investigation indicates that the subsurface soils are capable of supporting the building foundations (Dames & Moore, 1996). The fire station will not expose persons or property to geologic hazards.

Heavy rainfall during construction could result in short-term soil erosion at the site.

The majority of the site will be paved and the remainder will be landscaped for aesthetic and erosion control purposes. Two retaining walls are proposed to prevent erosion from the steep slope fronting Lumiaina Street. Onsite storm water will be directed to the municipal storm water system of Lumiaina Street via drains, curbs, and swales.

The proposed facility is not anticipated to induce geologic hazards or accelerate erosion.

**Mitigation**

During construction, the contractor will implement erosion control measures as specified by the civil engineer to ensure that soil-laden storm water does not flow offsite. A typical erosion control measure is construction of temporary berms to impound the water onsite.

## 5.4 WATER RESOURCES

### Affected Environment

There are drinking water wells at the adjacent BWS facility. The groundwater, approximately 200 feet beneath the site, is part of the Waipahu Aquifer system, and has a high vulnerability to contamination (Dames & Moore, 1996c).

The site is not located in a flood hazard area. There are no surface water resources (e.g. streams, lakes, wetlands) within a 0.25-mile radius of the project site. Storm water from the site and neighboring areas discharges to the municipal storm water system aligned along Lumiaina Street.

### Impacts

Impacts are considered significant if the proposed facility will:

- Affect the quantity or quality of groundwater, or alter its direction of flow
- Alter the quantity or quality of surface water, or alter its direction of flow.

Neither construction nor operation of the fire station will impact the quality or flow of groundwater. The fire station will require potable water and the quantities required are subject to BWS approval.

The receiving water for the municipal storm water system is the Pacific Ocean. The following activities could potentially impact the quality of storm water discharge from the site: use of earth moving equipment during construction and the routine cleaning of vehicles. Soil and petroleum products from these activities could enter the storm water system and ultimately discharge to the Pacific Ocean.

### Mitigation

During construction activities, erosion control systems will be in place to contain the storm water on-site as described in Section 5.3.

Vehicle washing will be limited to a designated area (refer to Figure 2) and the resultant water will be directed to onsite landscaping. These areas will be designed to contain the vehicle wash water on the site. No vehicle wash water will be permitted to drain into the municipal storm drains. The apparatus room wash water will be directed to floor drains, and the water will pass through an oil-water separator prior to being discharged to the municipal sewer system. All unpaved ground surfaces will be landscaped to minimize soil runoff.

## 5.5 BIOLOGY (FLORA AND FAUNA)

### Affected Environment

Endemic vegetation and wildlife habitats are likely to have been destroyed through past commercial agriculture land use, and the more recent Waikele community development activities. The proposed fire station site is vacant and graded; and the only vegetation is scrub grass and perimeter landscaping (hibiscus hedge and young trees). No vertebrates or evidence of nesting were observed (Dames & Moore, 1996). The U.S. Fish and Wildlife Service does not anticipate any negative environmental impacts to flora or fauna to result from this project.

### Impacts

Impacts are considered significant if the proposed facility will:

- Result in a reduction of the number of any unique, rare or endangered species
- Introduce new species of plants or animals to an area.

The proposed facility site is not known to support sensitive plant or animal species. Construction, operation, and maintenance of the proposed facility is not anticipated to result in significant adverse impacts to biological resources.

### Mitigation

Because significant impacts to biological resources are not anticipated, mitigation is not required.

## 5.6 AESTHETICS

### Affected Environment

In general, the visual environment around the site consists of limited leeward coastline views to the southeast, and the open space quality of the park located adjacent to and east of the site. Immediately west, south, and north of the site, the views are compromised by development. The BWS facility blocks the views east and southeast from the residential units located directly across Lumiaina Place from the facility; but the units fronting the southern portion of Lumiaina Place have an unobstructed view east and southeast across the proposed fire station site toward the park.

### Impacts

Impacts are considered significant if the proposed facility will:

- Obstruct a scenic vista or view open to the public
- Create an aesthetically offensive site open to public view
- Introduce a new source of light or glare.

The fire station will be visible from the community park and to travelers along Lumiaina Street and Lumiaina Place, but it will generally blend with the developed nature of the surrounding land uses. The views southeast from those Parkview At Waikele units located directly across Lumiaina Place from the site will be obstructed by the fire station.

There will be outdoor lighting at the fire station. The lights will be directed to the ground surface, and the glare will be minimal.

The proposed facility is expected to result in long-term adverse but not significant impacts to the aesthetic environment.

**Mitigation**

To ensure that the proposed fire station's design and landscaping is consistent with surrounding development and acceptable to the Waikele community, the Waikele Community Association Board will be asked to review and comment on the architectural plans. There is no mitigation planned for the loss of views from The Parkview at Waikele units that front the southern portion of Lumiaina Place. Reportedly, the residents of The Parkview at Waikele were informed when purchasing their homes that the County planned to build a facility on the vacant lot, but no design drawings were available at the time. The Parkview At Waikele Homeowners Association was given an opportunity to review the Draft EA and comment.

**5.7 ARCHAEOLOGICAL AND CULTURAL RESOURCES****Affected Environment**

As described in Section 5.6, the project area and site have been subjected to significant surface disturbance in recent history. During the pre-EA consultation, the State Historic Preservation Division (SHPD) reviewed existing literature and determined "...it is unlikely that significant historic sites will be found in the project area." The environmental documents for the Waikele Community (Environmental Communications, 1986) and the Waikele Elementary School (RMTC, 1996) did not report any archaeological or cultural sites within the Waikele area.

**Impacts**

Impacts are considered significant if the proposed facility will:

- Alter or destroy a prehistoric or historic archaeological site
- Result in physical or aesthetic effects to a prehistoric or historic building, structure, or object
- Will affect unique ethnic cultural values or ethnic or sacred uses.

According to SHPD the project is not likely to physically impact significant archaeological or historic resources. The project will not affect cultural, ethnic, or religious values or practices.

**Mitigation**

Because impacts to archaeological or historic resources are not anticipated, mitigation is not required. In the unlikely event that burial remains are discovered during construction, the SHPD will be notified and construction activities will cease.

**5.8 LAND USE**

**Affected Environment**

Existing adjacent land uses range from commercial to residential to open space and are described in Section 3.1. The only planned changes to adjacent land uses are improvements to the County park, inclusive of a swimming pool and recreation center. The Waikele Fire Station is a planned land use for the parcel and is indicated on the County Planning Department's public facilities map.

**Impacts**

Impacts are considered significant if the proposed facility will:

- Result in substantial change to the present or planned land use of an area.

The proposed facility is consistent with and will not affect current land uses in the vicinity, and it will not preclude development of the proposed improvements at the County park. Therefore, no land use impacts will result from project construction, operation, or maintenance.

**Mitigation**

No land use impacts will result from the proposed facility, therefore mitigation is not required.

**5.9 SOCIO-ECONOMIC ENVIRONMENT**

**Affected Environment**

Central Oahu's rapid population growth in recent years, and the forecasts for continued growth through the year 2020, are described in Section 2.0. Economically, the Waikele community has benefited from the Waikele commercial center, which attracts shoppers from the entire island.

**Impacts**

Impacts are considered significant if the proposed facility will:

- Affect existing housing or create demand for additional housing
- Alter the location, distribution, density, or growth rate of the human population in the project area
- Affect economic conditions in the project area.

The fire station will not affect (positively or negatively) housing or population conditions of the project's surrounding community; therefore, it will not result in adverse social impacts. In fact, it is the recent and forecasted changes in the socio-economic characteristics of Waikele and neighboring communities that dictate the need for a new fire station in the area.

Construction of the Waikele Fire Station will support construction and construction-related employment on a short-term basis. The most significant long-term socio-economic impact resulting from the operation and maintenance of the facility is the protection of life and property against loss due to fire.

**Mitigation**

No mitigation is required, because no adverse social or economic impacts will result from the proposed facility.

**5.10 INFRASTRUCTURE AND PUBLIC SERVICE**

**Affected Environment**

The project area is connected to the municipal sewerage, storm drainage, and solid waste collection systems. BWS supplies potable water, and Hawaiian Electric Company, Inc. provides electricity to the project area.

The Pearl City Police Station serves the Waikele area and response time is approximately 6 minutes, and considered adequate (RMTC, 1996). As described in Section 2.0, Waipahu Fire Station is currently providing fire protection services to the Waikele area, and the emergency response time continues to increase. St. Francis Medical Center West is the closest hospital serving Waikele.

**Impacts**

Impacts are considered significant if the proposed facility will:

- Result in a need for new or altered government services, including increased road maintenance or construction
- Tax the police, fire, or medical services.

Connecting the Waikele Fire Station to existing service networks will not require extensive modifications or new system construction.

The new fire station will have a publicly accessible emergency call button onsite, and the presence of fire fighters may provide a perception of added security for the neighborhood. The station will likely participate in community service activities typical of other fire stations, such as blood pressure testing

and fire prevention education. There are no plans to accommodate community meetings at the new facility, but suitable facilities are already available within the community.

No adverse impacts to infrastructure or public services are anticipated.

#### **Mitigation**

Because no adverse public service or infrastructure impacts will result from the proposed facility, mitigation is not required.

### **5.11 HAZARDS**

#### **Affected Environment**

The fire station site will contain two above-ground storage tanks, as described in Section 3.3. One will contain liquefied petroleum gas (LPG or liquid propane), and the other, diesel fuel. The wash water that is generated during routine apparatus room floor cleaning will drain to an oil-water separator before discharging into the municipal sewer system. The accumulated petroleum-based waste will be collected and disposed of offsite.

#### **Impacts**

Impacts are considered significant if the proposed facility will:

- Potentially expose people to a new or existing health hazard.

There are added, yet minor, potential risks to the community associated with the handling and storage of petroleum products on site.

#### **Mitigation**

The above-ground tanks will be installed, operated, and maintained in accordance with all federal and State regulations. The diesel fuel double-containment tank will be enclosed on three sides by a 6-foot concrete masonry block wall for safety and aesthetic reasons.

The oil-water separator will be inspected regularly and the resultant sludge removed for proper disposal. The oil-water separator will be installed in a concrete vault to mitigate any inadvertent spills or leaks to the environment.

Perimeter security fencing on the site will mitigate against vandalism and control access to the site.

The professional fire fighters will take all necessary precautions to guard against and respond effectively to onsite spill or fire incidents, thereby protecting the community from potential hazards originating onsite.

## 5.12 TRAFFIC

### Affected Area

The proposed Waikele Fire Station site is located at the northeast corner of the Lumiaina Street and Lumiaina Place intersection (Lumiaina intersection). Lumiaina Street is a four-lane divided County road. It is a primary access route to the Waikele Commercial Center and H-1 (via Paiwa Street). Along the site's western boundary is Lumiaina Place, a two-lane County road that terminates approximately 100 feet north of the BWS facility (Figure 1).

There are no traffic control lights at the Lumiaina intersection (Figure 1). Traffic lights are located at the intersection of Lumiaina Street and the entrances to the commercial center (approximately 600 feet west); and the intersection of Lumiauau Street and Lumiaina Street (approximately 3,000 feet east).

A divided pedestrian sidewalk/bikeway is aligned along the northern edge of Lumiaina Street. Hibiscus hedges are planted in the median strips of the pedestrian walkway/bikeway and Lumiaina Street.

### Impacts

Impacts are considered significant if the proposed facility will:

- Create a safety hazard
- Require rerouting of existing roadways or major roadway construction.

Careful consideration was given to choosing the safest and most efficient pattern of traffic flow for emergency vehicles to and from the site. Representatives of the Building Department, the Honolulu Fire Department, and the project civil engineers and architects determined that ingress and egress on Lumiaina Place is preferred over Lumiaina Street.

Three primary concerns regarding the Lumiaina Street alternative were: (1) the median strip of the road and the pedestrian walkway would have to be extensively altered, (2) the grade of the site along Lumiaina Street would need to be cut down approximately 6 feet to street level, and (3) the pedestrian/bike traffic would be interrupted.

Response to emergencies will temporarily interrupt local traffic to and from The Parkview at Waikele. The advance warning sirens at the fire station and the slow speed limit of the residential community will allow adequate time to respond safely to the movement of emergency vehicles on Lumiaina Place. Lumiaina Place does not appear to be an area used by children at play (Dames & Moore, 1996b). The sidewalk and curbing will be modified to accommodate vehicle entrance and exit from the fire station property, and some members of the community will be inconvenienced by the loss of street parking on Lumiaina Place. Each work shift consists of only five fire fighters, therefore the impact on the amount of local traffic will be minimal.

The project will not require rerouting or construction of a roadway. The proposed fire station is not expected to have any significant impacts on traffic operations in the study area.

#### **Mitigation**

Safety is always a consideration when emergency vehicles enter busy roadways such as Lumiaina Street. Warning signals will be placed at the intersection of Lumiaina Place and Street. The County Department of Transportation Services will review the design plans.

## **6.0 RELATIONSHIP OF THE WAIKELE FIRE STATION TO GOVERNMENT LAND USE PLANS AND POLICIES**

### **6.1 STATE LAND USE DISTRICT DESIGNATION**

The subject parcel was reclassified from State Land Use Agricultural District to Urban District along with the rest of the Waikele community lands prior to development (LUC Docket No. A85-594). A fire station is a permissible land use within the Urban District, and no land use changes will be required.

### **6.2 STATE COASTAL ZONE MANAGEMENT PROGRAM**

All of the Hawaiian Islands are located within the Coastal Zone Management (CZM) Area as defined in Hawaii Revised Statutes Chapter 205A. The Office of State Planning manages the CZM program and will review the Waikele Fire Station proposal for consistency with CZM program policies and objectives. The following is a summary of the CZM program objectives and a description of how the proposed Waikele Fire Station Project supports those objectives.

#### *Objective 1. Provide coastal recreational opportunities accessible to the public.*

The fire station will be located at a distance greater than one mile from the ocean and will have no impact on public access to coastal recreational areas.

#### *Objective 2. Protect, preserve, and where desirable, restore those natural and manmade historic and prehistoric resources in Hawaiian and American history and culture.*

As described in Section 5.7, there will be no impact to cultural or archaeological resources resulting from this project.

*Objective 3. Protect, preserve, and, where desirable, restore or improve the quality of coastal scenic and open space resources.*

The project will be aesthetically consistent with surrounding land uses. Coastal scenic resources will not be impacted, but there will be limited unavoidable impacts to open space resources. Refer to Section 5.6 for a description of existing conditions, potential impacts and mitigation.

*Objective 4. Protect valuable coastal ecosystems, including reefs, from disruption and minimize adverse impacts on all coastal ecosystems.*

Storm water runoff from the project site will be directed to the municipal storm water system which discharges into the Pacific Ocean. As described in Section 5.3, mitigation will be employed to minimize adverse impacts of the runoff on the receiving water.

*Objective 5. Provide public or private facilities and improvements important to the State's economy in suitable locations.*

The project is not a coastal dependent development; therefore, it is not relevant to this objective.

*Objective 6. Reduce hazards to life and property from tsunami, storm waves, stream flooding, erosion, subsidence, and pollution.*

The fire station will have no impact on tsunami, storm waves, stream flooding, and subsidence. Refer to Sections 5.3 and 5.4 for discussions of potential impacts on erosion and water resources, as well as proposed mitigation measures.

*Objective 7. Improve the development review process, communication, and public participation in the management of coastal resources and hazards.*

This EA communicates the potential short-and long-term impacts of the fire station as well as proposed mitigation. The public is invited to review and comment on the project pursuant to HRS Chapter 343.

*Objective 8. Stimulate public awareness, education, and participation in coastal management.*

The public is invited to review and comment on this EA pursuant to HRS Chapter 343.

*Objective 9. Protect beaches for public use and recreation.*

The fire station will have no impact on beach use.

*Objective 10. Implement the State's ocean resources management plan.*

The fire station is consistent with the objectives of the ocean resources management plan and will have no impact on the implementation of the plan.

**6.3 CITY AND COUNTY OF HONOLULU GENERAL PLAN**

The proposed facility is consistent with the objectives and policies of the General Plan of the City and County of Honolulu (1992). The objective most relevant to the proposed fire station is, "to protect the people of Oahu and their property against natural disasters and other emergencies, traffic and fire hazards, and unsafe conditions." One of the policies aimed at meeting this objective is to "provide adequate fire protection and effective fire prevention programs."

**6.4 CENTRAL OAHU DEVELOPMENT PLAN**

The proposed Waikele Fire Station is located within the Central Oahu Development Plan (DP) Area and is specifically mentioned as a planned community facility (C&C, 1995). The fire station site is currently designated as Park on the DP Land Use Map, and will be administratively redesignated to Public Facility by the Planning Department upon completion of the project. The site is designated as "fire station site determined" on the DP Public Facilities Map.

**6.5 COUNTY ZONING**

The proposed facility parcel is zoned P-2, General Preservation, and a fire station is a permitted use. The building height and setbacks will exceed the development standards and administrative approval will be required.

**7.0 REQUIRED PERMITS AND APPROVALS**

The proposed facility will require the following permits:

- Building Permit for building, electrical, plumbing, sidewalk/driveway, and demolition work from the Building Department (BD)
- Connection to the City's Storm Water Sewer System from the Department of Public Works (DPW)
- Certificate of Occupancy from the BD
- Combustible and Flammable Liquids Tank Installation from the Honolulu Fire Department (HFD)
- Grading, Grubbing, and Stockpiling Permit from DPW
- Liquefied Petroleum Gases Permit from the HFD
- Sewer Connection Permit from DPW
- Street Usage Permit from Department of Transportation Services
- Administrative approval for variance from development standards from the Department of Land Utilization

## 8.0 FINDINGS AND CONCLUSIONS

As shown in Table 1, Summary of Adverse Environmental Impacts, the proposed facility will generate emergency response noise and will block the views from residential units located directly west of the site; however, the economic and public health benefit of improved fire protection for the entire community will outweigh its non-mitigatable adverse impacts. Other adverse impacts that were described in this EA are mitigatable. The proposed facility is consistent with land use regulations and policies in effect within the State of Hawaii and the City and County of Honolulu.

ENVIRONMENTAL ASSESSMENT

WAIKALE FIRE STATION

Table 1. Summary of Adverse Environmental Impacts

RESOURCE (Reference)	POTENTIAL ADVERSE IMPACT		ST <sup>1</sup>	LT <sup>2</sup>	PROPOSED MITIGATION
	DESCRIPTION				
AIR QUALITY (Section 5.1)	Increased emissions due to construction vehicles		X		Comply with DOT regulations for construction vehicle and equipment maintenance
	Fugitive dust from grading activities		X		Institute watering or tackifier program
	Construction noise		X		Comply with DOH noise guidelines or obtain variance permit
	Recreation noise			X	Recreation area located on east side of property away from residences
	Emergency response noise			X	Non-mitigatable. Exempt from DOH noise guidelines
EARTH: TOPOGRAPHY, GEOLOGY, SOILS, and CLIMATE (Section 4.3)	Soil erosion due to storm events during construction		X		Implement best management practices to contain water on-site
	Soil erosion due to storm events during operation of station			X	Landscape all unpaved areas
WATER RESOURCES (Section 4.4)	Soil and petroleum products washing to storm drains and the Pacific Ocean			X	Landscape all unpaved areas to mitigate soil erosion and use oil-water separator to remove petroleum products
BIOLOGY (FLORA AND FAUNA) (Section 4.5)	(NONE)				
AESTHETICS (Section 4.6)	Obstructed views east and southeast from the Parkview At Waikale residences directly west of the site			X	Non-mitigatable
ARCHAEOLOGICAL AND CULTURAL RESOURCES (Section 4.7)	Design and landscaping inconsistent with community guidelines			X	Waikale Community Association Board will review and comment on design
	Inadvertent discovery of burial remains		X		Cease construction activities and call State Historic Preservation Division
LAND USE (Section 4.8)	(NONE)				
SOCIO-ECONOMIC (Section 4.9)	(NONE)				
INFRASTRUCTURE AND PUBLIC SERVICE (Section 5.10)	(NONE)				
HAZARDS (Section 5.11)	Above ground storage tanks (diesel, LPO) are a potential fire hazard			X	Tanks will be installed, operated, and maintained according to government regulations. The diesel tank will be enclosed on three sides by a cinder block wall
TRAFFIC (Section 5.12)	Safety at intersection of Lumiaina Street and Lumiaina Place			X	Warning signal will be installed at the intersection

1. ST = Short-term (construction) impact      2. LT = Long-term (operation, maintenance) impact

**9.0 REFERENCES**

- C&C (City and County of Honolulu), 1995. Planning Department. Central Oahu Development Plan Report. June.
- C&C, 1993. Planning Department. Forecast of Population, Housing, and Employment on Oahu by Small Area 1990 to 2010.
- C&C, 1992. Planning Department. General Plan: Objectives and Policies.
- Dames & Moore, 1996. Geotechnical Investigation for the Proposed Waikele Fire Station. Job No. 044025-155-011. July.
- Dames & Moore, 1996b. Site visit field notes. Job No. 04402-150-053. June.
- Dames & Moore, 1996c. Phase I Environmental Site Assessment, Proposed Waikele Fire Station. June.
- DOH (State Department of Health), 1996. Noise and Radiation Branch. Personal communication: telephone. June 6.
- Environmental Communications, 1986. Final Environmental Impact Statement for Waikele. Prepared for AMFAC Property Development Corp. January.
- RMTC (R.M. Towill Corporation), 1996. Draft Environmental Assessment for Waikele Elementary School. Prepared for the Department of Accounting and General Services. May.

## 10.0 CONSULTATION

## 10.1 PRE-EA CONSULTATION

A pre-EA consultation letter was mailed to the following entities to solicit their comments on the proposed fire station. The letter briefly described the proposed project and location. Those who replied are indicated by an asterisk (\*), responses with substantive comments are indicated by bold typeface, and those who were sent a copy of the Draft EA are indicated by "✓".

Federal

U.S. Department of Agriculture  
 U.S. Army Corps of Engineers, Pacific Ocean Division  
 U.S. Commission on Persons with Disabilities  
 U.S. Department of the Interior Fish and Wildlife Service

State

\* Department of Accounting and General Services  
 Department of Agriculture  
 Department of Business, Economic Development and Tourism  
     **Land Use Commission**  
     **Energy, Resources, and Technology Program**  
 Department of Defense  
 \* Department of Education  
 Department of Land and Natural Resources  
     ✓ **Land Division**  
     **State Historic Preservation Division**  
 ✓ Department of Health  
     Environmental Management Division  
 \* Department of Transportation  
 Office of State Planning  
     ✓ **Coastal Zone Management Program (telephone response)**  
 Office of Hawaiian Affairs  
 University of Hawaii, Environmental Center

County

**Board of Water Supply**  
 \* Department of Housing and Community Development  
 ✓ Department of General Planning  
 ✓ Department of Land Utilization  
 ✓ Department of Parks and Recreation  
 ✓ Department of Public Works

- ✓ **Department of Transportation Services**
- ✓ **Department of Wastewater Management**
- Police Department**
- ✓ **Honolulu Fire Department**

**Community**

- ✓ **Waipahu Neighborhood Board**
- Waipahu Public Library**
- Pearl City Public Library**
- \* **Hawaiian Electric Company**
- Hawaiian Telephone Company**
- Sierra Club, Hawaii Chapter**
- ✓ **AOAO Parkview At Waikele**
- ✓ **Waikele Community Association Board**

**10.2 DRAFT EA REVIEW**

The comment letters received during the 30-day comment period and the Building Department responses to those comments are printed on the following pages.

WILLIAM J. CAVITANO  
DIRECTOR

MAJOR GENERAL STEWART V. BOULANGER  
DIRECTOR OF CIVIL DEFENSE

ROY C. PRICE, SR.  
VICE DIRECTOR OF CIVIL DEFENSE



STATE OF HAWAII  
DEPARTMENT OF DEFENSE  
OFFICE OF THE DIRECTOR OF CIVIL DEFENSE  
3849 DIAMOND HEAD ROAD  
HONOLULU, HAWAII 96816-4493

July 23, 1996



PHONE (808) 733-4300  
FAX (808) 733-4387

RECEIVED  
JUL 25 1996

DAMES & MOORE

TO: Dames & Moore  
1050 Queen Street, Suite 204  
Honolulu, Hawaii 96814

FROM: Mr. Roy C. Price, Sr.  
Vice Director of Civil Defense, DOD

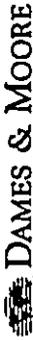
SUBJECT: PRE-ASSESSMENT CONSULTATION FOR WAIKELE FIRE STATION

State Civil Defense (SCD) appreciates this opportunity to comment on the Pre-Assessment Consultation submitted by Dames & Moore for the Waikale Fire Station, 94-840 Lumidaina Street, Waikale, Oahu, Hawaii; TRK: 9-4-07:75.

We do not have any comments specifically directed at this Pre-Assessment Consultation. However, the proposed fire station is located in an area vulnerable to natural hazards and, as the property is developed, the following should be addressed:

1. The impact of hazards such as tropical cyclone/hurricane force winds (to include terrain amplification) and the inundation resulting from torrential rains associated with such storms; earthquakes and flooding.
2. The design and construction of facilities to mitigate against and withstand the hazards previously addressed. Additionally, the doors to the fire station need to be designed and installed to withstand tropical cyclone/hurricane force winds (to include terrain amplification) anticipated for the site of the station.

If you have any further questions, please call Mr. Mel Nishihara of my staff at 733-4300.



1050 QUEEN STREET, SUITE 204, HONOLULU, HAWAII 96814  
(808) 593-1116 FAX: (808) 593-1193

July 31, 1996

Mr. Roy Price, Sr.  
Vice Director of Civil Defense  
State of Hawaii  
3949 Diamond Head Road  
Honolulu, Hawaii 96816-4493

Waikale Fire Station  
94-840 Lumidaina Street, Waikale, Oahu  
TRK: 9-4-07:75  
Draft Environmental Assessment (EA)

Dear Mr. Price:

On behalf of the City and County of Honolulu Building Department, thank you for your pre-assessment comment letter of July 23, 1996. The 30-day comment period on the Draft-EA began on July 21, 1996 and will end on August 22, 1996. I have enclosed a copy of the Draft-EA for your review.

Your comments regarding the impact of natural hazards on the fire station are noted. A geotechnical investigation of the site determined that there are no earthquake hazards associated with the new facility.

The site is located in an area of "undetermined but possible flood hazards" according to the Flood Insurance Rate Map. Storm water control measures will be employed during construction and are incorporated into the project design to minimize erosion and flooding of the fire station.

The fire station is being designed to meet hurricane-resistant design standards as they are described in the Uniform Building Code (1994). The doors and windows will be designed to mitigate hazards from tropical cyclone/hurricane winds.

Thank you for participating in the environmental review process. Should you have questions or require further information, please contact me at extension 38.

Sincerely,  
DAMES & MOORE

*Faith R. Caplan*  
Faith R. Caplan  
Environmental Planner

enclosure  
cc: Gordon Wallace, Urban Works  
Clifford Lam, Building Department

(808) 593-1116

**DAMES & MOORE**

1050 QUEEN STREET, SUITE 204, HONOLULU, HAWAII 96814  
(808) 593-1116 FAX: (808) 593-1198

July 31, 1996

Mr. John Dooling  
Oahu Land Agent  
Department of Land and Natural Resources  
State of Hawaii  
P.O. Box 621  
Honolulu, Hawaii 96809

Waikale Fire Station  
94-840 Lumiana Street, Waikale, Oahu  
TMK: 9-4-07:75  
Draft Environmental Assessment (DEA)

Dear Mr. Dooling:

On behalf of the City and County of Honolulu Building Department, thank you for your comment letter of July 18, 1996, which states your support of the subject project. All applicable Federal, State, and County permits will be obtained prior to construction.

Your suggestion that the fire station provide meeting or learning facilities, where needed, for use by the community is appreciated. As stated in Section 5.10 of the DEA, the fire station will participate in community service activities; but, there will be insufficient space and infrastructure onsite (e.g. restrooms and parking) to provide meeting and learning facilities. There are existing and planned facilities within the community that are more appropriate for community meetings than the fire station.

Thank you for participating in the environmental review process. Should you have questions or require further information, please contact me at extension 38.

Sincerely,

DAMES & MOORE

*John R. Caplan*

Faith R. Caplan  
Environmental Planner

cc: Gordon Wallace, Urban Works  
Clifford Lau, Building Department

(808) 593-1116 FAX: (808) 593-1198

AGRICULTURE DEVELOPMENT  
ARCHITECTURE  
ASBESTOS ABATEMENT  
AVIATION AND OCEAN RECONSTRUCTION  
COMMERCE AND TRADE  
COMPUTER AND INFORMATION TECHNOLOGY  
CONSTRUCTION  
CORPORATE  
COURT REPORTING  
FORESTRY AND WILDLIFE  
GENERAL CONTRACTING  
HISTORIC PRESERVATION  
INDUSTRIAL  
INSURANCE  
LAND ACQUISITION  
LAND RECONSTRUCTION MANAGEMENT



STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
LAND DIVISION  
P.O. BOX 621  
HONOLULU, HAWAII 96809

REF LM JGD

Ms. Faith Caplan  
Environmental Planner  
Dames & Moore  
1050 Queen St. Ste 204  
Honolulu, HI 96814

Dear Ms. Caplan:

Subject: Draft Environmental Assessment for the Waikale Fire Station, 94-840 Lumiana Street, Waikale, Oahu  
TMK: 1st/ 9-4-07:75

RECEIVED  
JUL 19 1996

DAMES & MOORE

The Oahu District Office of Land Management has no objections to the project as the subject proposed fire station has a definite need in the locality, taking into consideration with the long and mid term planning effort to shift Honolulu District's population towards the Ewa plain.

We request that the applicant obtain all applicable Federal, State and County permits prior to construction. We suggest that the fire station assist the growing needs of the community by providing facilities where needed for use by the community, such as meeting and learning facilities to be used with, or in conjunction with the adjacent County park.

Should you have any questions, you may contact us at 587-0433.

Very truly yours,

*John Dooling*  
John Dooling  
Oahu Land Agent

cc: Mr. Nekoba  
Mr. Matsumoto 685-



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

LAWRENCE M. MOORE  
DIRECTOR OF HEALTH

In reply, please refer to

July 12, 1996

96-091A/epo

Ms. Faith R. Caplan  
Environmental Planner  
Dames & Moore  
1050 Queen Street, Suite 204  
Honolulu, Hawaii 96814

Dear Ms. Caplan:

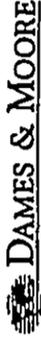
Subject: Pre-Assessment Consultation  
Waikale Fire Station  
94-840 Lumaina Street  
Waikale, Oahu  
TMK: 9-4-07: 75

Thank you for allowing us to review and comment on the subject project. We would like to see the following topics addressed in the Draft Environmental Assessment:

1. Construction noise impacts and mitigating measures;
2. Fugitive dust impacts during construction and mitigating measures; and
3. Petroleum storage.

Sincerely,

  
BRUCE S. ANDERSON, Ph.D.  
Deputy Director for Environmental Health



1050 QUEEN STREET, SUITE 204, HONOLULU, HAWAII 96814  
(808) 593-1116 FAX: (808) 593-1198

July 31, 1996

Mr. Bruce Anderson  
Department of Health  
State of Hawaii  
P.O. Box 3378  
Honolulu, Hawaii 96801

Waikale Fire Station  
94-840 Lumaina Street, Waikale, Oahu  
TMK: 9-4-07:75  
Draft Environmental Assessment (EA)

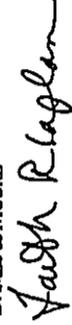
Dear Mr. Anderson:

On behalf of the City and County of Honolulu Building Department, thank you for your pre-assessment comment letter of July 12, 1996. The 30-day comment period on the Draft-EA began on July 23, 1996 and will end on August 22, 1996. A copy of the Draft-EA was mailed to the Department of Health on July 11, 1996.

The Draft-EA does address your concerns for noise (Section 5.2) and dust impacts (Section 5.1), as well as petroleum storage (Section 5.11). We welcome any comments you may have on the Draft-EA.

Thank you for participating in the environmental review process. Should you have questions or require further information, please contact me at extension 38.

Sincerely,

DAMES & MOORE  
  
Faith R. Caplan  
Environmental Planner

RECEIVED  
JUL 15 1996

DAMES & MOORE

cc: Gordon Wallace, Urban Works  
Clifford Lau, Building Department

BENJAMIN J. CAVETANO  
COMMISSIONER



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

August 26, 1996

DAMES & MOORE

RECEIVED  
AUG 27 1996

LAWRENCE M. BERRY  
DIRECTOR OF HEALTH

In reply, please refer to

96-091B/epo

Ms. Faith R. Caplan  
Environmental Planner  
Dames & Moore  
1050 Queen Street, Suite 204  
Honolulu, Hawaii 96814

Dear Ms. Caplan:

Subject: Draft Environmental Assessment (EA)  
Waikale Fire Station  
94-840 Lumialaina Street  
Waikale, Oahu  
TMK: 9-4-07: 75

Thank you for allowing us to review and comment on the subject project. We do not have any comments to offer at this time, as our earlier comments were satisfactorily addressed in this EA.

Sincerely,

*Bruce S. Anderson*  
BRUCE S. ANDERSON, PhD.  
Deputy Director for Environmental Health



STATE OF HAWAII  
OFFICE OF ENVIRONMENTAL QUALITY CONTROL

230 SOUTH KING STREET  
FOURTH FLOOR  
HONOLULU, HAWAII 96813  
TELEPHONE (808) 554-4185  
FACSIMILE (808) 554-4185

August 21, 1996

RECEIVED  
AUG 23 1996

DAMES & MOORE

Mr. Clifford Lau  
Building Department  
City and County of Honolulu  
650 South King Street  
Honolulu, Hawaii 96813

Dear Mr. Lau:

Subject: Draft Environmental Assessment for the Waikale Fire Station, Oahu

Thank you for the opportunity to review the subject document. We have the following comment.

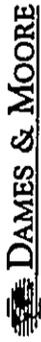
1. According to the draft environmental assessment, two above ground fuel storage tanks will be installed at the project site. Please describe in detail the specifications for the fuel storage tanks. How do the specifications compare with current government and industry standards?

Should you have any questions, please call Jeyan Thirugnanam at 586-4185.

Sincerely,

*Jeyan Thirugnanam*  
for Gary Gill  
Director

C: Dames and Moore



1050 QUEEN STREET, SUITE 204, HONOLULU, HAWAII 96814  
(808) 593-1116 FAX: (808) 593-1196

September 5, 1996

Mr. Gary Gill, Director  
Office of Environmental Quality Control  
State of Hawaii  
220 South King Street, Fourth Floor  
Honolulu, Hawaii 96813

Waikole Fire Station  
94-840 Lualaba Street, Waikole, Oahu  
TMK: 9-4-07: 75  
Draft Environmental Assessment (EA)  
Job Number 04402-150-053

Dear Mr. Gill:

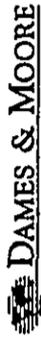
On behalf of the City and County of Honolulu Building Department, thank you for your Draft-EA comment letter of August 21, 1996.

In response to your request for more detailed information on the above ground storage tanks associated with the project, we offer the following:

A 250-gallon capacity liquid propane (or LPG) tank will be installed for the building's stove/oven. This will be an above ground steel tank, owned by the gas supplier and installed on the user's concrete pad or foundation. The tank will be located outdoors, 10 feet minimum from the nearest building, from any source of ignition, and from the nearest property line.

A 500-gallon diesel fuel above-ground, double containment tank will be installed on the project site, as indicated on Figure 2 of the Draft EA. The primary tank is constructed of steel, conforming to U.L. Standard 142. Secondary containment will consist of a 30 mil thick high-density polyethylene geomembrane and is encased in six inches of concrete. The tank wall system will be listed in UL 2085 and shown to have a minimum two-hour fire rating. No underground piping will be required as the dispenser will be mounted on the tank. The tank will have an overflow containment sump and a leak monitoring system.

(P4) 005-722-wpd-04402-150-053-053



Mr. Gary Gill  
September 5, 1996  
Page 2

Both tanks will be installed, operated, and maintained in accordance with all federal and State regulations.

Should you have any questions, or require additional information, please contact me at extension 29.

Sincerely,  
DAMES & MOORE

*Wendie McAllister*  
Wendie McAllister  
Environmental Planner

WRM/an

cc: Gordon Wallace, Urban Works  
Clifford Lau, Building Department

(P4) 005-722-wpd-04402-150-053-053

DEPARTMENT OF PARKS AND RECREATION  
CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET  
HONOLULU, HAWAII 96813



JEREMY HARRIS  
MAYOR

DONA L. HANAIKE  
DIRECTOR  
ALVIN K. CAULFIELD  
DEPUTY DIRECTOR

RECEIVED  
JUL 30 1996

July 26, 1996

DAMES & MOORE

Ms. Faith R. Caplan  
Dames and Moore  
1050 Queen Street, Suite 204  
Honolulu, Hawaii 96814

Dear Ms. Caplan:

Subject: Draft Environmental Assessment (EA) for the  
Waikale Fire Station proposed by the  
City and County Building Department

Thank you for the opportunity to review the draft EA  
for the Waikale Fire Station. Based upon the information  
presented in the draft EA, we do not foresee that the  
proposed project will have any significant negative impact on  
Waikale Community Park and recreational resources in the  
area.

Should you have any questions or comments, please  
contact Terry Hildebrand of our Advance Planning Branch at  
523-4246.

Sincerely,

*Donna L. Hanaike*  
DONA L. HANAIKE  
Director

DLH:el

DAMES & MOORE

1050 QUEEN STREET, SUITE 204, HONOLULU, HAWAII 96814  
(808) 593-1116 FAX: (808) 593-1198

August 5, 1996

Ms. Dona L. Hanaike, Director  
Department of Parks and Recreation  
City and County of Honolulu  
650 South King Street  
Honolulu, Hawaii 96813

Waikale Fire Station  
94-840 Lumiaina Street, Waikale, Oahu  
TMK: 9-4-07:75  
Draft Environmental Assessment (EA)

Dear Ms. Hanaike:

On behalf of the City and County of Honolulu Building Department, thank you for your comment  
'letter of July 26, 1996, which states that the fire station would not have foreseeable significant  
negative impacts on the Waikale Community Park and recreational resources in the area.

Should you have questions or require further information, please contact me at extension 38.

Sincerely,

DAMES & MOORE

*Faith R. Caplan*  
Faith R. Caplan  
Environmental Planner

cc: Gordon Wallace, Urban Works  
Clifford Lau, Building Department

(OPTIONAL FORM NO. 10) (MAY 1962 EDITION)

U.S. GOVERNMENT PRINTING OFFICE

DEPARTMENT OF PUBLIC WORKS  
CITY AND COUNTY OF HONOLULU

630 SOUTH KING STREET, 13TH FLOOR • HONOLULU, HAWAII 96813  
PHONE: (808) 523-4341 • FAX: (808) 527-8437



JEREMY HARRIS  
MAYOR

KENNETH E. SPRAGUE  
DIRECTOR AND CHIEF ENGINEER  
DARWIN A. HIRAHAKOYO  
DEPUTY DIRECTOR  
ENV 88-172

July 26, 1996

RECEIVED  
JUL 30 1996

Ms. Faith R. Caplan  
Environmental Planner  
Dames and Moore  
1050 Queen Street, Suite 204  
Honolulu, HI 96814

DAMES & MOORE

Dear Ms. Caplan:

Subject: Draft Environmental Assessment  
Waikale Fire Station  
TMK: 2-4-07: 75

In response to your letter of July 10, 1996, we offer the following comment:

Page 10, Item 5.4 Water Resources: Vehicle wash water is not allowed to discharge into the municipal storm drain system. Instead, it should be discharged into the sanitary sewer system.

Should you have any questions, please contact Mr. Alex Ho, Environmental Engineer, at 523-4150.

Very truly yours,

KENNETH E. SPRAGUE  
Director and Chief Engineer

cc: Building

DAMES & MOORE  
1050 QUEEN STREET, SUITE 204, HONOLULU, HAWAII 96814  
(808) 593-1116 FAX: (808) 593-1198

August 5, 1996

Mr. Kenneth Sprague  
Department of Public Works  
City and County of Honolulu  
650 South King Street, 11th Floor  
Honolulu, Hawaii 96813

Waikale Fire Station  
94-840 Lumina Street, Waikale, Oahu  
TMK: 2-4-07:75  
Draft Environmental Assessment (EA)

Dear Mr. Sprague:

On behalf of the City and County of Honolulu Building Department, thank you for your Draft-EA comment letter of July 26, 1996.

Your comment regarding the disposal of vehicle wash water (Section 5.4) is noted. As a result of recent conversations between your department and the County Building Department, the grading of the rear paved area will be designed to direct the vehicle wash water to the landscaped areas of the station. No wash water will be permitted to drain into the city storm drain system. Relevant sections of the EA (5.4 and 5.11) will be modified to reflect this change in project design.

Thank you for participating in the environmental review process. Should you have questions or require further information, please contact me at extension 38.

Sincerely,

DAMES & MOORE

Faith R. Caplan  
Environmental Planner

FRC/fo  
cc: Gordon Wallace, Urban Works  
Clifford Lau, Building Department

DEPARTMENT OF TRANSPORTATION SERVICES  
CITY AND COUNTY OF HONOLULU

PACIFIC PAPER PLAZA  
711 KAPIOLANI BOULEVARD, SUITE 1200  
HONOLULU, HAWAII 96813



RECEIVED

AUG 21 1996

CHARLES O. SWANSON  
DIRECTOR  
DAMES & MOORE

August 20, 1996

7/96-03152R

Ms. Faith R. Caplan  
Environmental Planner  
Dames & Moore  
1050 Queen Street, Suite 204  
Honolulu, Hawaii 96814

Dear Ms. Caplan:

Subject: Waikole Fire Station

In response to your July 10, 1996 letter, we reviewed the draft environmental assessment for the proposed fire station. Construction plans for work within the City's right-of-way should be provided to this department for review and approval.

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

Respectfully,

*Charles O. Swanson*  
for CHARLES O. SWANSON  
Director

**DAMES & MOORE**

1050 QUEEN STREET, SUITE 204, HONOLULU, HAWAII 96814  
(808) 593-1116 FAX: (808) 593-1176

August 22, 1996

Mr. Charles Swanson, Director  
Department of Transportation Services  
City and County of Honolulu  
711 Kapiolani Boulevard, Suite 1200  
Honolulu, Hawaii 96813

Waikole Fire Station  
94-840 Lumaina Street, Waikole, Oahu  
TMK: 9-4-07:75  
Draft Environmental Assessment (DEA)

Dear Mr. Swanson:

On behalf of the City and County of Honolulu Building Department, thank you for your comment letter of August 20, 1996. Construction plans for work within the City's right-of-way will be provided to your department for review.

Should you have questions or require further information, please contact me at extension 38.

Sincerely,

DAMES & MOORE

*Faith R. Caplan*  
Faith R. Caplan  
Environmental Planner

cc: Gordon Wallace, Urban Works  
Clifford Lau, Building Department

DEPARTMENT OF WASTEWATER MANAGEMENT  
**CITY AND COUNTY OF HONOLULU**  
830 SOUTH KING STREET, 3RD FLOOR, HONOLULU, HAWAII 96813  
PHONE: (808) 521-7483 • FAX: (808) 521-7475



JEREMY HARRIS  
MAYOR

FELIX B. LIMTIACO, P.E.  
DIRECTOR  
CHRYSLER OILUNA SERVICE  
DEPUTY DIRECTOR  
In reply refer to:  
WCC 96-79

July 23, 1996

Ms. Faith R. Caplan  
Environmental Planner  
DAMES & MOORE  
1050 Queen Street, Suite 204  
Honolulu, Hawaii 96814

**RECEIVED**  
JUL 24 1996

DAMES & MOORE

Dear Ms. Caplan:

Subject: Draft Environmental Assessment for  
Waialele Fire Station - Engine Company Number 42  
TMK: 9-4-007-075

The municipal wastewater system is available and adequate to accommodate the proposed 5,000 square foot fire station on the subject 0.67 acre parcel. A "Sewer Connection Application" form was received and approved on July 15, 1996.

If you have any questions, please contact Ms. Tessa Yuen of the Service Control Branch at 523-4936.

Very truly yours,

*Felix B. Limtiaco*  
FELIX B. LIMTIACO  
Director

**DAMES & MOORE**

1050 QUEEN STREET, SUITE 204, HONOLULU, HAWAII 96814  
(808) 593-1116 FAX: (808) 593-1195

July 31, 1996

Mr. Felix Limpiaco, Director  
Department of Wastewater Management  
City and County of Honolulu  
650 South King Street, 3rd Floor  
Honolulu, Hawaii 96813

Waialele Fire Station  
94-840 Luminous Street, Waialele, Oahu  
TMK: 9-4-07:75  
Draft Environmental Assessment (EA)

Dear Mr. Limpiaco:

On behalf of the City and County of Honolulu Building Department, thank you for your comment letter of July 23, 1996, which states that a "Sewer Connection Application" for the subject project was approved on July 15, 1996.

Should you have questions or require further information, please contact me at extension 38.

Sincerely,

DAMES & MOORE

*Faith R. Caplan*  
Faith R. Caplan  
Environmental Planner

cc: Gordon Wallace, Urban Works  
Clifford Lau, Building Department

FIRE DEPARTMENT  
CITY AND COUNTY OF HONOLULU

3375 KOAPAKA STREET, SUITE 204  
HONOLULU, HAWAII 96819



JEREMY HARRIS  
DATE

ANTHONY J. LOPEZ, JR.  
FIRE CHIEF  
ATTAHO E. LEONARD  
FIRE DEPUTY CHIEF

RECEIVED  
AUG 9 1996  
DAMES & MOORE

August 7, 1996

Ms. Faith R. Caplan  
Environmental Planner  
Dames & Moore  
1050 Queen Street, Suite 204  
Honolulu, Hawaii 96814

Dear Ms. Caplan:

SUBJECT: Draft Environmental Assessment  
Waikole Fire Station, Waikole, Oahu, Hawaii

We have reviewed the subject material and have the following comment:

Pages 4 & 17: Recommend an additional emergency traffic signal on Lumiaina Street, east of the station before the curve. See Page 2. This is in reference to a CAT signal.

Thank you for the opportunity to comment on the project.

Should you have any questions, please call Assistant Chief Arthur Ugalde of our Administrative Services Bureau at 831-7774.

Sincerely,

ANTHONY J. LOPEZ, JR.  
Fire Chief

AJL/AT:ay

DAMES & MOORE

1050 QUEEN STREET, SUITE 204, HONOLULU, HAWAII 96814  
(808) 593-1116 FAX: (808) 593-1198

September 5, 1996

Mr. Anthony J. Lopez, Jr., Fire Chief  
Fire Department  
City and County of Honolulu  
3375 Koapaka Street, Suite H425  
Honolulu, Hawaii 96819-1869

Waikole Fire Station  
94-840 Lumiaina Street, Waikole, Oahu  
TMK: 9-4-07: 75  
Draft Environmental Assessment (EA)  
Job Number 04402-150-053

Dear Mr. Lopez:

On behalf of the City and County of Honolulu Building Department, thank you for your Draft-EA comment letter of August 7, 1996.

Your recommendation for an additional warning signal on Lumiaina Street, east of the station and before the curve is noted. The exact number and locations of warning signals will be determined during the detailed design phase of the project. Your concerns will be addressed at that time.

Sincerely,

DAMES & MOORE

Wendie McAllister  
Environmental Planner

WRM/Jan

cc: Gordon Wallace, Urban Works  
Clifford Lau, Building Department

(PH) 808-733-9404 FAX 808-593-0131

PLANNING DEPARTMENT  
CITY AND COUNTY OF HONOLULU  
850 SOUTHERN STREET  
HONOLULU, HAWAII 96813



JEREMY HARRIS  
SAVOR

CHERYL D. SOON  
CHIEF PLANNING OFFICER  
CARROLL TRASKAUM  
DEPUTY CHIEF PLANNING OFFICER

LW 7/96-1512

August 23, 1996

Ms. Faith R. Caplan  
Environmental Planner  
Dames & Moore  
1050 Queen Street, Suite 204  
Honolulu, Hawaii 96814

Dear Ms. Caplan:

Draft Environmental Assessment for  
Waikole Fire Station

DAMES & MOORE

RECEIVED  
AUG 27 1996

We have reviewed the subject Draft Environmental Assessment and have no objections to the proposed project. The proposed fire station is designated as site determined, within 6 years, on the Central Oahu Development Plan (DP) Public Facilities Map.

The subject site is currently designated as Park on the Central Oahu DP Land Use Map with a building height limit of 25 feet. We have no objections to the proposed 30-foot height as long as the form and design of the proposed facility are compatible with the surrounding park and residential uses. Upon notification of the project completion by the applicant, the Planning Department will administratively amend the Central Oahu DP Land Use Map to redesignate the subject site from Park to Public Facility.

Thank you for the opportunity to comment on this matter. Should you have any questions, please contact Lin Wong of our staff at 523-4485.

Sincerely,

*Cheryl D. Soon*  
CHERYL D. SOON  
Chief Planning Officer

CDS:fr

cc: Building Department

**DAMES & MOORE**  
1050 QUEEN STREET, SUITE 204, HONOLULU, HAWAII 96814  
(808) 593-1116 FAX: (808) 593-1198

September 5, 1996

Ms. Cheryl D. Soon, Chief Planning Officer  
Planning Department  
City and County of Honolulu  
650 South King Street  
Honolulu, Hawaii 96813

Waikole Fire Station  
94-840 Lumiaina Street, Waikole, Oahu  
TMK: 9-4-07: 75  
Draft Environmental Assessment (EA)  
Job Number 04402-150-053

Dear Ms. Soon:

On behalf of the City and County of Honolulu Building Department, thank you for your Draft-EA comment letter of August 23, 1996.

The project architect is working closely with the Building Department to ensure that the building form and design are compatible with the surrounding uses. The Building Department will notify your office upon completion of the project so that the Central Oahu DP Land Use Map can be administratively amended, as indicated in your letter.

Should you have any questions, or require additional information, please contact me at extension 29.

Sincerely,

DAMES & MOORE

*Wendie McAllister*  
Wendie McAllister  
Environmental Planner

WRM/an

cc: Gordon Wallace, Urban Works  
Clifford Lau, Building Department

PG1001-71-L-96-04-003-150-503-053