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MAR 16 11:45
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IN REPLY REFER TO:

March 16, 1990

MEMORANDUM

TO: The Honorable Marvin Miura, Director
Office of Environmental Quality Control

FROM: Joseph K. Conant, Executive Director

SUBJECT: Environmental Assessment and Negative Declaration
for the Proposed Waialua Multi-Family Housing Project
TMK: (2nd Division) 4-9-08:13
Kamoku, Lanai, Maui, Hawaii

Submitted herewith are four (4) copies of the Environmental Assessment and Negative Declaration for the subject project as required by the Office of Environmental Quality Control in compliance with Environmental Impact Statement Rules, Chapter 200, Section 11-200-11.

We would appreciate publication of this negative Declaration in your March, 1990 newsletter.

Should you have any questions, please contact Bob Imose, Project Coordinator, at 543-2951.

Joseph K. Conant

Executive Director

Enclosures

1990 - 03-23-LA-FBA

FILE COPY

**REQUEST FOR CHANGE IN ZONING
AND ENVIRONMENTAL ASSESSMENT**

WAIALUA MULTI-FAMILY HOUSING

KAMOKU, LANAI, MAUI, HAWAII

Prepared for

**LANAI COMPANY, INC.
650 Iwilei Road
Honolulu, Hawaii**

Prepared by

**GERALD PARK URBAN PLANNER
1245 Young Street, Suite 201
Honolulu, Hawaii**

For Submission to the

**HOUSING FINANCE AND DEVELOPMENT CORPORATION
STATE OF HAWAII**

February, 1990

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INTRODUCTION

Since the early 1920s when James Dole commenced commercial pineapple production on Lanai, the island has developed around this one commodity. Most of the island's usable agricultural lands are planted in pineapple and the island is still one of the largest pineapple plantations in the world. Castle and Cooke, Inc. owns the plantation and is the only major employer on the island. Almost all of the island's 2,100 residents live in Lanai City which is situated on a central plateau in the center of the island. Because of the community's origin as a plantation, housing conditions on the island are somewhat unique in two respects. First, virtually all of the housing was built by Castle and Cooke and its subsidiaries to house plantation workers and their families and second, the supply of housing is directly related to the needs of the plantation work force and businesses supporting the population. To this day, much of the island's housing stock is rented to plantation workers at subsidized rates (EDAW, 1981).

Significant changes to this housing balance are occurring with the advent of a new economic force--tourism--on the island. Castle and Cooke is nearing completion of two resort developments, The Lodge at Koele and Manale Bay Hotel, which will require a work force larger than what is available on the island. Rockresorts Incorporated, which is managing both hotels, projects the creation of 670 jobs upon full occupancy of both hotels. Together with approximately 30 plantation positions to be filled and 50-70 indirect jobs generated by completion of the hotels, approximately 770 new employees will be required by 1992. Of that total, 234 jobs are projected to be filled by current Lanai residents and 536 positions would be filled by in-migrating employees. Assuming 1.5 employees/dwelling, approximately 357 new housing units are needed in conjunction with completion of the hotels.

The Walalua Multi-Family Housing is one of several on-going or proposed housing projects, the sum of which should deliver a variety of dwelling unit types to meet the projected 1992 demand.

SECTION 1

DESCRIPTION OF THE PROPOSED PROJECT

Lanai Company, a subsidiary of Oceanic Properties, Inc., which in turn is a subsidiary of Castle & Cooke, Inc., proposes to develop a multi-family residential complex on lands situated in the ahupua'a of Kamoku, Island of Lanai, Lanai District, County of Maui, State of Hawaii. The project site is located at the northern end of Lanai City and is identified by tax map as Second Division, 4-9-08:13. The 9.6 acre parcel is bounded by Lanai Avenue to the east, Iwiolo Gulch and residential dwellings to the south, abandoned pineapple fields to the west, and abandoned pineapple fields and a power line easement to the north. A location map is shown in Figure 1.

A. Technical Characteristics

The proposed Waialua Multi-Family Housing project consists of 128 apartment units in sixteen (16) detached two-story structures plotted on the 9.6 acre site for a density of 13.3 units per acre (see Figure 2). Each structure will accommodate four (4) units per floor with a maximum of eight (8) units per structure.

Three building types are proposed:

<u>Building Type</u>	<u>Length</u>	<u>Width</u>	<u>Height</u>	<u>Area (SF)</u>
A	58'	44'	27'-6"	2,552
B	64'	44'	27'-6"	2,818
C	64'	44'	27'-6"	2,818

In addition, each unit will have an exterior storage closet of 22 SF, a 60 SF lanai, and a small fenced yard for both ground and second level units. The units are arranged so that all are corner units.

Four (4) to eight (8) units have been designated and designed for the handicapped.

The residential structures are two floors in height with the lower levels placed on concrete slab on grade foundations, wood framed with exterior hardboard siding, gypsum board interior walls, and topped by hip/gable asphalt shingle roofs.

Access will be taken from Lanai Avenue. A 28-foot wide, two-lane roadway is aligned down the middle of the development with landscaped medians and planting areas. The residential buildings are arranged in clusters (typically 4 buildings per cluster) on both sides of the road.

Two hundred sixty (260) on-grade, uncovered, off-street parking stalls will be provided for residents and guests. Parking is based on two parking stalls per unit as required by the Maui County Code.

A recreation pavilion will be constructed at the top end of the site and the surrounding area will be grassed for active recreation use. Areas for passive recreation will be created by the residential clusters which form or enclose a green space of approximately one-fourth acre.

Water service will be provided by an 8-inch water main with connections to existing lines on Lanai and Fraser Avenues.

Wastewater will be collected by on-site gravity mains and emptied into an existing manhole in Fraser Avenue. From the manhole, wastewater will be conveyed via 8-inch gravity line to the County Waste Stabilization Facility just west of Lanai City.

Existing drainage patterns will be maintained for the proposed development. The on-site drainage system will consist of swales diverting site drainage runoff into Iwiolo Gulch on the south and into the abandoned pineapple field on the west side. The site will be graded such that all structures, roads and parking areas are set above the 100-year flood elevation for Iwiolo Gulch, one of the major drainageways conveying storm water. Iwiolo Gulch will not be improved except for the portion of the Gulch traversing through the southern portion of the Multi-Family parcel; this portion of Iwiolo Gulch will be widened to convey the projected 100-year flood waters.

Electrical power, telephone, and cable TV service will be brought to the project site from existing systems along Lanal Avenue. All utility systems will be placed underground. Overhead lights are proposed for roadway and parking areas.

B. Economic Characteristics

The cost of the project is estimated at \$14.0 million (\$1990) for planning, design, and construction. This cost will be funded entirely by the Lanal Company as owner/developer.

Applicant proposes the rent structure shown below. The proposed rental rates would be in effect for 5 years subject to annual Consumer Price Index (CPI) adjustments and includes a Lanal Company rental subsidy for 77 units or 60% of the total units in the project. The distribution of the subsidy has not yet been determined.

<u>Area Unit Type</u>	<u>No. of Units</u>	<u>Floor Area (SF)</u>	<u>Gross Rental</u>	<u>Lanal Co. Rental Subsidy</u>	<u>Net Rent To Tenant</u>
1 Bdrm/1 Bath	28	510	\$650	\$250	\$400
2 Bdrm/1 Bath	72	715	800	180	620
2 Bdrm/2 Bath	16	714	826	180	645
3 Bdrm/2 Bath	12	941	900	200	700

Construction will commence after all necessary approvals are received. The project will be built in two increments with the first few units in the first increment of 64 units and accessory structures available for occupancy in December, 1990 and the second increment in May, 1991.

C. Social Characteristics

No residences or businesses will be displaced by the proposed project. The dwelling units will be made available to persons of all ages, income, and ethnicity. The project is anticipated to serve the housing needs of existing Lanal residents, future in-migrating resort workers, and employees in service activities such as police, fire, government, and business.

SECTION 2

SUMMARY DESCRIPTION OF THE AFFECTED ENVIRONMENT

A. Environmental

Lanai City is situated on a central plateau southwest of Lanaihale between the 1,000 - 2,000 foot elevation. Lanaihale, a volcanic peak which formed by the island, rises to elevation 3,370 feet. Lanai lies in the rain shadow of Maui and East Molokai hence the island is very dry. Rainfall averages 10 inches along the coast to 35 inches at Lanaihale. Owing to its high elevation, Lanai City experiences a temperate climate which often is characterized by cool temperatures, occasional heavy rainfall, low clouds, and fog.

The project site comprises an abandoned pineapple field located at the northern end of Lanai City and currently overgrown by assorted grasses, weeds, and scrub brush. Prior to the advent of commercial pineapple cultivation on Lanai in the 1920's, the site and adjoining lands were used for goat and sheep ranching (Hammatt, 1989) with Koele, immediately east of the project site, as the ranch center.

In general, the terrain is relatively level with the grade sloping gently at about 5% from northeast to southwest. Ground elevation ranges from a high of elevation 1,656 feet above sea level along Lanai Avenue to a low of 1,618 feet along the west property line.

Soils are of the Waihuna Series (Soil Conservation Service, 1972) consisting of silty clays underlain with weathered stones and pebbles. The soil is well drained, runoff is slow, permeability is moderately slow, and the erosion hazard is slight.

Most agriculturally suitable lands on Lanai including the project site are rated Unique Agricultural Land by the Agricultural Lands of Importance to the State of Hawaii (ALISH) system. Unique agricultural lands are defined as "land that has the special combination of soil quality, location, growing season, moisture supply, and is used to produce sustained high quality and or high yields of a specific crop . . .".

The property is not potentially susceptible to earthquakes or vulcanism. Lanai and the Island of Maui are classified Zone 2 on Seismic Risk Maps for the State of Hawaii (Uniform Building Code, 1986). The classification system uses a scale of 0 to 4 with Zone 4 areas having the highest seismic occurrence and danger.

Flood Insurance Rate Maps (FIRM) have not been prepared for Lanai.

Iwiole Gulch, a shallow soil embankment drainage channel, runs through an adjoining lot to the south before turning and traversing across the extreme southern corner of the property.

A second drainage was observed in the northeast corner of the subject parcel where an existing culvert passes beneath Lanai Avenue and discharged runoff generally along the north property line. At the time of our field survey, runoff had gouged a channel 2 feet deep, 2 feet wide, and 200 feet long through the soft soil.

In a biological survey of the project site, Nagata (No date) characterized the vegetation as mixed herbaceous species dominated by Spanish needle (Bidens pilosa), perla (Momordica charantia var. pavel), balloon flower (Gomphocarpus physocarpus), and sourgrass (Tricachne insularis). Guinea grass (Panicum maximum), weed verbena (Verbena litoralis), Dallas grass (Paspalum dilatatum), and 'uhaloa (Waltheria americana) are common.

Vegetation along the south boundary of the site generally consists of tall, dense growths of Guinea grass, Rhodes grass (Chloris gayana), and Christmas berry (Schinus terebinthifolius) but several cultivated species such as Vanda, banana (Musa x paradisiaca), pigeon pea (Cajanus cajan), and coconut (Cocos nucifera) are found in this area. In addition, a portion of the former pineapple fields appears to have been planted with vegetable crops at one time. Several cultivars of sweet potato (Ipomoea batatas) and three cherry tomato (Lycopersicon esculentum var. cerasiforme) plants persist amid the weedy vegetation.

Interestingly, Nagata observed two individual pa'u-o-hi'laka (Jacquemontia sandwicensis) a coastal specie, on the project site. Although endemic, the specie is neither threatened or endangered.

No fauna were observed at the time of this authors field survey. During a biological survey of the premises, Nagata sighted pheasant (Phasianus cochicus torquatus) and francolins (Francoelinus pondicerianus). No other fauna were reported but the probability of rodents occurring as residents or transients on the site is heightened because of the proximity to residences.

B. Cultural

Owing to its previous use for commercial pineapple cultivation, there is no physical evidence of archaeological or cultural features on the ground surface. In an archaeological reconnaissance of the premise, Hammatt (1989) reported:

"The Wai'ale'ale Multi-Family site has been severely impacted by years of commercial pineapple cultivation, channelizing of Iwiole Gulch, house and road way construction associated with Lana'i City, and subsequent residential gardening. Reports dealing with pineapple cultivation within proposed housing projects on Lana'i (Hammatt, Borthwick 1988b, Hammatt, Borthwick 1989) indicate a plow zone associated with long-term pineapple cultivation of up to three feet. There were no surface sites observed, and observations along the shallow banks of Iwiole were negative in terms of locating any subsurface features. Because of the paucity of surface materials observed (a single basalt flake), the depth of the plow zone and the unlikely probability of unearthing any subsurface features (except possibly post-1920 trash pits associated with existing homes and gardens) no further on-site archaeological work is deemed necessary."

C. Land Use Controls

Located at the northern edge of Lanai City, the property seemingly lies entirely within the State Land Use Urban District. A boundary interpretation, however, has determined that approximately 7.40 acres are classified Urban and 2.26 acres Agricultural (see Figure 3). To have the project conform with applicable land use controls, applicant will request a State land use district boundary amendment from Agricultural to Urban for the 2.26 acres. Because the petitioned area is less than 15 acres in size and not in the Conservation district, the Maui County Council rather than the State Land Use Commission is the decision-making authority.

In spite of the split State land use classification, the 9.66 acre site is community planned Single-Family and Multi-Family Residential (Lanai Community Plan, 1983). Although Maui County has a zoning code, there are no zoning maps to implement the community plan maps. The entire Urban District on Lanai is currently under the County's Interim zoning ordinance. Hence the property is not zoned for residential use and a change in zoning is required. Toward this end, petitioner is requesting also a zone change from Urban Interim to A-1 Apartment District.

The project site does not fall within the County delineated Special Management Area and Koele Project District.

D. Public Facilities and Services

1. Water

Lanai's potable water resources are concentrated in the mountainous area northeast of Lanai City (EDAW, 1981). Groundwater is tapped through a system of deep wells, tunnels, as an inclined shaft. The water distribution system is owned and maintained by Castle and Cooke. Beginning at the source in the mountains, the system extends throughout Lanai City and continues along Kaunapali Highway to the airport and barge harbor (Ibid, 1981).

In the vicinity of the project site, water is available from either 6-inch or 8-inch lines along Lanai Avenue. Alternatively, water can be extended to the site from an 8-inch line in Fraser Avenue.

2. Wastewater

Lanai City is serviced by a municipal wastewater system. Wastewater is collected within the town and gravity flows to a County maintained waste stabilization facility located immediately west of Lanai City. This facility is being expanded to provide for proposed housing and related projects.

Both Lanai and Fraser Avenues in the vicinity of the project site are sewered with 8-inch lines.

3. Streets

The major roadway on Lanai is the 6-mile long, State owned Kaunalapau Highway connecting Lanai City with Kaunalapau Harbor and airport. Two County roads provide access to the northeast and south shores from Lanai City: Keomuku Road which leads to Maunalei Point and Manele Road which connects to Manele Bay. All other roadways are County owned.

Lanai Avenue, which is the main north-south road through Lanai City passes to the east of the site and will be the only access route to the Waialua Multi-Family Housing subdivision. Fraser Avenue, also a north-south road paralleling Lanai Avenue, terminates before reaching the project site.

Fronting the project site, Lanai Avenue is of concrete construction with a pavement width of 30 feet. There are no curbs or gutters but a sidewalk has been placed on the makai side of the road beyond which a 30 foot deep x 500 foot long (approximate) landscape setback has been established. This area has been grassed and a single row of hibiscus planted along the makai edge.

4. Solid Waste

Solid waste is disposed at a landfill approximately 5 miles from Lanai City between the airport junction and Kaunapau Harbor. The 9-acre site has a service life of 28 years (EDAW, 1981).

Domestic refuse is collected weekly by County of Maui refuse workers.

5. Recreation

Existing recreation opportunities on the island are limited. State, County, and private facilities include Lanai Gymnasium and Tennis Courts, Lanai Community Center, Hulupoe Beach Park, Manele Beach Park, and Cavendish Golf Course (DLNR, 1985). A new community recreation complex—consisting of baseball and softball fields, jogging paths, gymnasium, recreation room, and volleyball courts—was recently constructed by Castle and Cooke.

6. Public Schools

Lanai High and Elementary School (K-12) is the only school on the island. The 30 classroom school has a 1989-1990 school year enrollment of 479 students (Department of Education, 1989) well under its capacity of 600 students.

7. Protective Services

The Lanai Police Station is located on 8th Street and Fraser Avenue and is staffed by six police officers.

Fire protection service originates from the Lanai Fire Station located at the intersection of Kaunapau Highway and Fraser Avenue. Constructed in 1989, this County facility is manned 24 hours a day. Sixteen firefighters are assigned to the station and four (4) are on duty at all times. Their primary firefighting equipment is a new 1,000 gpm pumper.

The fire station also houses an emergency ambulance and crew providing service 24 hours a day. Six emergency medical technicians are based at the station and two (2) are on duty at all times.

8. Power and Communication

Electrical power for all Lanai is supplied by Maul Electric Company from its power plant in Lanai City.

Telephone service is provided by Hawaiian Telephone Company. Overhead lines are strung on poles throughout Lanai City.

Cable television is provided by Chronicle Cablevision.

SECTION 3

SUMMARY OF POTENTIAL ENVIRONMENTAL IMPACTS
AND MEASURES TO MITIGATE ADVERSE EFFECTS

The scope of the project was discussed with the landowner/developer and their architectural and engineering consultants. State and County agencies were apprised of plans to develop the property and their thoughtful comments have been incorporated into the site plan and project components.

Time was spent in the field collecting data and noting conditions of the site and nearby areas. The discussions and field investigations allowed us to identify existing environmental conditions and features against which impact assessment would be made. These influencing conditions are:

- (1) The site is vacant and unimproved;
- (2) There are no cultural or historic features on the site;
- (3) No flora or fauna listed or proposed for threatened or endangered status were observed;
- (4) There are no streams, estuaries, ponds, wetlands or freshwater bodies on the property;
- (5) the project is not proposed in a flood prone area or lands subjected to natural and man-made hazards;
- (6) The site is planned for single-family and multi-family residential use on the Lanai Community Plan; and
- (7) Water, sewer, power, and communication systems are available and adequate to service the proposed use.

Given the paucity of natural resources and the absence of unusual physical features on the site, the project is not expected to result in significant direct environmental impacts. With the onset of construction comes the greatest physical changes to the land as vegetation will be grubbed, natural grades recontoured, and the ground surface remodeled (temporarily and permanently) to achieve design elevation for building foundations, roads and parking areas, utility lines, and landscaping. Cumulatively, these actions and the myriad of activities associated with actual building construction generally increase soil loss, surface runoff, off-site sedimentation, air and noise pollution, vehicle traffic, and construction debris. Although unavoidable, these impacts are generally temporary and can be mitigated by adhering to standard construction practices and complying with State and County environmental rules and regulations. For example, erosion is common to most construction sites and can be effectively controlled through temporary measures such as incremental grading, constructing berms and swales, and final measures such as landscape plantings and a permanent drainage system.

Fugitive dust and exhaust emissions from construction vehicles and equipment can be expected throughout the buildout period. Fugitive dust can be controlled by wetting down exposed areas with water or other dust suppressants. Frequent rainfall will help mitigate dust and other control measures stipulated in State Department of Health Administrative Rules (Chapter 60) may be implemented. The General Contractor also shall keep the jobsite and adjacent roadways free of mud and debris.

Temporary and unavoidable acoustical impacts will occur during the construction period. Maximum sound levels in the range of 85-96 dB(A) would be generated by earthmoving and pneumatic impact (excepting pile drivers) equipment. Noise is most pronounced and therefore most annoying during the site work phase of any development. Reductions in sound levels, frequency, and duration can be expected during actual building construction and post-construction phases.

Construction noises may annoy nearby residents accustomed to the quiet and sounds of nature associated with vacant land. Like fugitive dust, noise cannot be avoided. To minimize noise, construction will be limited to the hours of 7:00 a.m. - 5:30 p.m. and no equipment will be operated without mufflers or approved noise suppression devices.

Existing drainage patterns will be maintained both during and after construction of the Waialua Multi-Family Housing development. Erosion control measures to mitigate silt pollution of downstream lands and drainageways will be implemented during the construction phase. These erosion control measures will conform to Maui County guidelines and regulations. Iwiole Gulch will be widened where it traverses through the southern portion of the project site. This widening of Iwiole Gulch will lower the projected 100-year floor elevation height and will provide a factor of safety for existing houses on the opposite bank of Iwiole Gulch from being inundated by the projected 100-year flood.

Should subsurface archaeological features be unearthed during construction, work in the affected area will cease and historic authorities consulted for proper disposition of the finds.

The proposed project conforms to the desired use of the property presented in the Lanai Community Plan. The property lies within the State Land Use Urban District and only a modest expansion of same is required to accommodate the entire development. Its location in the Urban District, its multi-family designation, and its non-agricultural use for several years indicates that the property is of low agricultural value and should be put to more productive use. Developing this property will not initiate wholesale and widespread land use changes to urban type uses. Rather, the introduction of alternative economic activities and subsequent economic expansion seems to be the catalyst for change (land use and otherwise) on Lanai.

Two changes in land use designations are pre-requisites for developing the property: a State land use district boundary amendment from Agricultural to Urban for 2.26 acres of the property and rezoning the entire 9.66 acre parcel from Urban Interim to A-1 Apartment District. Lanai Company has requested and will receive governmental assistance for processing to completion of the proposed project. The State Housing Finance and Development Corporation (HFDC) under the provision of Chapter 201E, HRS and Act 15 Session Laws of Hawaii (1985) will amend the State land use district boundary from Agricultural to Urban for 2.26 acres and initiate zoning changes from Urban Interim to A-1 Apartment District. Effectuating these changes are not anticipated to significantly alter the use of adjoining lands. A boundary amendment would place the entire parcel into a single land use district. The Urban rather than Agricultural District is the appropriate district given the community's desire for multi-family residential use of the property. With respect to standards for determining Urban district boundaries: the site is close to places of economic activity and employment, it can be readily serviced by existing water, sewer, and road systems, the terrain is relatively flat and free of environmental hazards, is contiguous to an existing urban district and would not foster scattered urban development, and is planned for residential use on County plans.

A zone change to A-1 Apartment District implements the desired use of the property. The A-1 zoning fosters low-rise, low-density development that complements the rural character, physical layout, and human scale qualities of Lanai City.

Few persons would dispute the contention that with the coming of Castle and Cookes' ambitious resort developments, housing (or the lack of it) is of immediate concern to Lanai residents, community leaders, and government officials. The proposed action will not solve the perceived 'housing crisis' but in conjunction with other planned housing developments should help to balance Lanai's housing supply and demand equation. In and of itself, the Waialua Multi-Family Housing project expands available housing stock, offers individuals and families a choice of housing type, and provides rental housing opportunities for individuals and households desiring a multi-family residential environment. The project is intended to meet the housing needs of single persons, young couples, small households with children, and the handicapped regardless if they are Lanai residents or part of the in-migrating work force.

In terms of number, the 128 unit project could accommodate a tenant population of between 370 - 400 persons (at 3.04 persons per household x 128 units) a majority of whom are expected to be in-migrants. This additional population is an off-shoot of community desire to increase population (projected at 4,500 persons by 2003) in order to sustain basic community services (EDAW, 1981). In the past, cultural differences between immigrants, long-term residents, and temporary workers resulted in social tension. As stated in the Lanai Community Plan, an assimilation program for immigrants should be initiated with the objective of curtailing the chances of social history being repeated.

Existing water source and distribution systems can accommodate the planned development. Average daily demand is estimated at 71,680 gpd.

Wastewater discharge is estimated at 30,464 gpd and there is sufficient capacity in the existing collection and treatment system to service this flow.

Potential traffic impacts were evaluated in the context of all contemplated developments in Lanai City and in other areas of the island (Pacific Planning and Engineering, 1989: See Appendix A). Impacts are described by the concept of Level-of-Service (LOS). There are five LOS categories for gauging traffic delay. The categories range from LOS 'A' (little or no delay) to LOS 'F' (extreme traffic delay); LOS 'C' (average traffic delay) which is typical for many streets and intersections, is an acceptable level of delay. Results of the traffic analysis show that the Waialua project will not adversely affect existing levels of service. The volume of traffic to be generated coupled with already low existing traffic volumes will have little effect on roadway capacity.

It is not likely for one housing development to overtax existing public services and facilities. The proposed Waialua Multi-Family Housing project in itself will neither necessitate a decline in public service if gauged by service availability, coverage area and response time, nor place unwarranted demands for increases in service. It is anticipated, however, that the cumulative effects of several housing developments will necessitate gradual expansion of public services and facilities. For example, water and sewer systems have been (or are being) upgraded to accommodate population growth. In the long-term and as the need arises, bolstering of police and fire protection, medical services, education, and recreational facilities and programs are expected. Typically these types of services and facilities follow growth in an area on an on-demand basis.

SECTION 4

ALTERNATIVES TO THE PROPOSED ACTION

A no action option is not reasonable considering the urgency to provide needed housing for existing residents and in-migrating employees of the two new resort hotels on the island. Locating the project elsewhere likewise is unreasonable because there is no other vacant area of comparable size with appropriate land use designations (as the Wai'ale'ale site) in Lanai City targeted for development at this time.

With regards to design alternatives, an entry from Fraser Avenue (which would have been extended to the project site) was initially proposed but dropped from consideration. Traffic circulation is an important design feature in any site plan but in this instance was outweighed by the desire to maintain residential privacy, foster a sense of security, and encourage pedestrian travel.

SECTION 5

DETERMINATION OF SIGNIFICANCE AND RECOMMENDATION

Chapter 200 (Environmental Impact Statement Rules) of Title 11, Administrative Rules of the State Department of Health, contains criteria for determining whether an action may have significant effects on the environment (11-200-12). The relationship of the proposed project to these criteria is discussed below.

- (1) Involves an irrevocable commitment to loss or destruction of any natural or cultural resource;

The site is devoid of significant natural and cultural resources.

- (2) Curtails the range of beneficial uses of the environment;

The property was used previously for cattle grazing (until the 1920s) and commercial pineapple cultivation. More recently, the site was removed from cultivation and remains vacant and untended. The site is planned for residential development and its conversion for that use is both a suitable and beneficial use of the environment.

- (3) Conflicts with the State's long-term environmental policies or goals and guidelines as expressed in Chapter 344, Hawaii Revised Statutes, and any revisions thereof and amendments thereto, court decisions or executive orders;

The proposed action does not conflict with the State's long-term environmental goals, objectives, policies, and guidelines.

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

The project will aid in averting an anticipated housing shortage on Lanai brought on by the planned opening of two resort developments in 1990. As such, its construction and completion should enhance community welfare.

- (5) Substantially affects public health;

Developing the property for housing will not affect or pose a threat to public health.

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

In conjunction with other housing projects and resort development, cumulative effects on public facilities can be expected. However, improvements to first line infrastructure (water and sewer) are in various stages of completion and can accommodate both an increase in the labor force and visitors to Lanai. As population increases, demands will be placed on parks, protective services, and schools as is typical for urban or urbanizing areas.

- (7) Involves a substantial degradation of environmental quality;

Environmental quality will not be substantially degraded.

- (8) Is individually limited but cumulatively has considerable effect upon the environment or involves a commitment for larger actions;

The project is one of several projects geared to provide housing for Lanai residents and in-migrating persons staffing two new resort developments on the island. It is an accommodating action rather than one that fosters a commitment for a larger action.

- (9) Substantially affects a rare, threatened or endangered species, or its habitat;

The site harbors no rare, threatened, or endangered species of plant or animal.

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

Short-term effects on air quality and the acoustical environment can be expected during construction.

- (11) Affects an environmentally sensitive area such as a flood plain, tsunami zone, erosion-prone area, geologically hazardous land, estuary, fresh water, or coastal waters.

The project is not proposed on environmentally sensitive areas.

Based on the above criteria, it is concluded that the Waiialua Multi-Family Housing project will not result in significant adverse environmental impacts and an Environmental Impact Statement is not required.

REFERENCES

- County of Maui. 1983. Lanai Community Plan.
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APPENDIX A
TRAFFIC IMPACT ANALYSIS

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October 10, 1989

Mr. Wallace Miyahira
Vice-President
Oceanic Properties, Inc.
PO Box 2780
Honolulu, HI 96803

Dear Mr. Miyahira:

Subject: Lanai City, Waialua Multi-Family Project -- Traffic Impacts

This letter report summarizes the traffic impact assessment for the subject project. The assessment reported herein was conducted for the Traffic Circulation Study for Lanai City completed in May 1989. The Report is titled "Lanai City Traffic Circulation Plan."

While this report basically reports the traffic impact of the Subject Project, Lanai Company is reviewing the cumulative traffic effects of various developments proposed for the City within the next few years. The Circulation Study addresses this cumulative effect. The Study's overall finding is that the contemplated developments do not require major road improvements. Minor intersection improvements are identified, which are desirable but not required as a result of the traffic from the contemplated developments in Lanai City.

Project Description

The proposed project is a residential development to be located in Lanai City. New subdivision streets will be constructed and connected to the existing street network.

The subject project consists of 128 new multi-family dwelling units. The location of the new subdivision is at the northern end of Lanai City. The general location within Lanai City is shown in Figure A. The new subdivision would form the new border of residential development in this area.

Trip Generation and Traffic Assignment

The traffic generated by the proposed project is dependent on the increased driving population represented by the number of new dwelling units. Vehicle trips generated by the proposed project were estimated using average trip rates from the Trip Generation Report, 1987 (Fourth Edition), Institute of Transportation Engineers (ITE). Estimated new dwelling units to be built for the Waialua project is about 128 homes.

The following table provides the results of the project's vehicle trips during the morning and afternoon. These values are conservative in that they would be on the *higher* end of trip generation rates particularly for an area with Lanai's non-urban characteristics.

<u>Morning Peak Hour Traffic</u>	<u>Enter</u>	<u>Exit</u>
Vehicles Per Dwelling Unit (Rate)	0.10	0.34
Number of Vehicles	13	44
<u>Afternoon Peak Hour Traffic</u>		
Vehicles Per Dwelling Unit (Rate)	0.37	0.19
Number of Vehicles	47	24

The Project's vehicle trips were then assigned to the existing road network based on the location and amount of activities or land uses that would attract or generate vehicle trips. Based on a review of the street network, 50% of the trips would use Fraser Avenue, while the remaining 50% would use Lanai Avenue.

Table 1 below describes the traffic volumes at the intersection of Fraser Avenue and Eighth Street collected by Pacific Planning & Engineering, Inc. during the morning and afternoon peak hours as indicated by available traffic records. Forecast traffic for 1995 is also listed and include all contemplated developments in Lanai City, and in other areas of the island such as the new Manele Resort development.

Table 1. Peak Hour Traffic Volumes
Fraser Avenue @ Eighth Street

<u>Turning Movement</u>	<u>1988 Peak Hour</u>		<u>1995 Peak Hour</u>		
	<u>Morning</u>	<u>Afternoon</u>	<u>Morning</u>	<u>Afternoon</u>	
Fraser Avenue					
Northbound	LT	2	2	2	2
	TH	26	44	55	123
	RT	10	7	49	117
Southbound	LT	17	43	70	79
	TH	49	58	130	109
	RT	2	2	2	2
Eighth Street					
Eastbound	LT	2	2	2	2
	TH	2	1	2	1
	RT	3	2	3	2
Westbound	LT	11	16	117	85
	TH	2	0	2	0
	RT	15	30	34	135

Lanai Avenue @ Eighth Avenue

Turning Movement	1988		1995		
	AM Pk Hr	PM Pk Hr	AM Pk Hr	PM Pk Hr	
Lanai Avenue					
Northbound	LT	60	21	59	47
	RT	10	21	10	21
Southbound	LT	13	3	13	3
	TH	92	90	161	172
	RT	31	46	173	148
Eighth Street					
Eastbound	LT	27	26	87	192
	TH	7	7	7	7
	RT	9	24	28	69
Westbound	LT	8	1	8	1
	TH	0	2	0	2
	RT	5	0	5	0

Traffic Impacts

Impact by the new project traffic was measured through the capacity analysis contained in the Highway Capacity Manual (HCM) Special Report 209 published in 1985. The impact is mainly measure at intersections where delays to drivers are the greatest, which occurs during the morning and afternoon peak hours. As traffic volumes increase as with the additional traffic from new developments, the greater the delay or impact to drivers. This delay or impact is represented by the concept of Level-of-Service (LOS). LOS analysis for the Waialua project traffic is performed using the method for unsignalized (i.e., no traffic lights) intersections, for the closest major intersection which is Fraser Avenue at Eighth Street in Lanai City.

LOS categories for unsignalized intersections is determined by the reserve of

unused capacity of a travel lane as shown in the table below. The potential capacity is determined by the size and frequency of gaps in conflicting traffic that can accommodate the side street traffic volumes. The *reserve* capacity of the side-street is equal to the *potential* capacity minus the traffic demand. As the reserve capacity decreases, the delay to traffic and the LOS worsens.

Table 2. Level-of-Service Criteria for Unsignalized Intersections

Reserve Capacity (PCPH)	Level of Service	Expected Delay to Minor Street Traffic
> 400	A	Little or no delay
300-399	B	Short traffic delays
200-299	C	Average traffic delays
100-199	D	Long traffic delays
0-99	E	Very long traffic delays
< 0	F	Extreme traffic delays

Table 3 below contains the results of the LOS analysis for Fraser and Eighth Street in Lanai City. The primary reason for selecting this intersection is the present and future importance of serving traffic, and its high volume of traffic. Field observation indicated that intersections adjacent to the development have and will have very low volumes, with no likelihood of any measurable impact. Thus, the intersection would be the worst case condition.

The trips from the Waialua project estimated to exit and enter the project during the morning and afternoon peak hours were added to the present traffic, in addition to the other contemplated developments in Lanai City. Thus, all future traffic contemplated by development plans are included in the results.

The results indicate that the the various traffic movements will have LOS C or higher. (Movements not shown have the right-of-way, and thus flow without

interruption or delay with no decrease in LOS.) With the developments, the traffic generated would not be large enough to change the LOS. Thus, the results the developments would not have a significant impact on the traffic operations.

Field investigation of the adjacent streets did not indicate any major roadway deficiencies that would be affected by the new Waialua subdivision. In addition, Fraser Avenue will be the main access road which handles local area traffic only. Fraser will not serve through traffic based on future traffic circulation plans.

Table 3. Level-of-Service Results
Fraser Avenue and Eighth Street

<u>Turning Movement</u>	<u>1988 Peak Hour</u>		<u>1995 Peak Hour</u>	
	<u>Morning</u>	<u>Afternoon</u>	<u>Morning</u>	<u>Afternoon</u>
Fraser Avenue				
Northbound LT	A	A	A	A
Southbound LT	A	A	A	A
Eighth Street				
Eastbound	LT	C	C	C
	TH	A	A	A
	RT	A	A	A
Westbound	LT	C	C	C
	TH	A	A	A
	RT	A	A	A

Lanai Avenue and Eighth Street

<u>Turning Movement</u>	<u>1988</u>		<u>1995</u>	
	<u>AM Pk Hr</u>	<u>PM Pk Hr</u>	<u>AM Pk Hr</u>	<u>PM Pk Hr</u>
Lanai Avenue				
Northbound LT	A	A	A	A
Southbound LT	A	A	A	A
Eighth Street				
Eastbound	LT	C	B	C
	TH	A	A	A
	RT	A	A	A
Westbound	LT	B	A	B
	TH	A	A	A
	RT	A	A	A

Conclusions and Recommendation

While vehicle volumes will increase somewhat, the project will have little effect on the existing road capacity in Lanai City. This is mainly due to the low number of trips generated by the proposed Waialua development and the low existing level of traffic volumes on the existing roads adjacent to the proposed development. No mitigating actions are required from the increased project traffic. However, we recommend that standard traffic pavement markings such as stop lines be installed on the roads serving the new subdivision at the intersections along Fraser Street and Lanai Avenue.

Howard Abe
Howard Abe
Principal

FILE COPY

NEGATIVE DECLARATION
FOR
WAIALUA MULTI-FAMILY HOUSING PROJECT

1. Applicant

Lanai Company
P. O. Box L
Lanai City, Lanai, Hawaii 96793
Telephone: 565-7233

or

650 Iwilei Road
Honolulu, Hawaii 96817
Telephone: 531-4454

2. Agencies and Organizations Consulted in Preparing the Assessment

State

Department of Agriculture
Department of Education
Department of Land and Natural Resource

County

Department of Fire Control
Department of Planning
Police Department
Department of Public Works

3. Summary Description of the Action's Economic, Social and Environmental Characteristics

Lanai Company, a subsidiary of Oceanic Properties, Inc., which in turn is a subsidiary of Castle & Cooke, Inc., proposes to develop a multi-family residential complex on lands situate in the ahupua'a of Kamoku, Island of Lanai, Lanai District, County of Maui, State of Hawaii. The project site is located at the northern end of Lanai City and is identified by tax map as Second Division, 4-9-08:13. The 9.6 acre parcel is bounded by Lanai Avenue to the east, Iwiolo Gulch and residential dwellings to the south, abandoned pineapple fields to the west, and abandoned pineapple fields and a power line easement to the north. A location map is shown in Figure 1.

A. Technical Characteristics

The proposed Waialua Multi-Family Housing project consists of 128 apartment units in sixteen (16) detached two-story structures plotted on the 9.6 acre site for a density of 13.3 units per acre (see Figure 2). Each structure will accommodate four (4) units per floor with a maximum of eight (8) units per structure. Each unit will have an exterior storage closet of 22 SF, a 60 SF lanai, and a small fenced yard for both ground and second level units. The units are arranged so that all are corner units.

Four (4) to eight (8) units have been designated and designed for the handicapped.

The residential structures are two floors in height with the lower levels placed on concrete slab on grade foundations, wood framed with exterior hardboard siding, gypsum board interior walls, and topped by hip/gable asphalt shingle roofs.

Access will be taken from Lanai Avenue. A 28-foot wide, two-lane roadway is aligned down the middle of the development with landscaped medians and planting areas. The residential buildings are arranged in clusters (typically 4 buildings per cluster) on both sides of the road.

Two hundred sixty (260) on-grade, uncovered, off-street parking stalls will be provided for residents and guests. Parking is based on two parking stalls per unit as required by the Maui County Code.

A recreation pavilion will be constructed at the top end of the site and the surrounding area will be grassed for active recreation use. Areas for passive recreation will be created by the residential clusters which form or enclose a green space of approximately one-fourth acre.

Water service will be provided by an 8-inch water main with connections to existing lines on Lanai and Fraser Avenues.

Wastewater will be collected by on-site gravity mains and emptied into an existing manhole in Fraser Avenue. From the manhole, wastewater will be conveyed via 8-inch gravity line to the County Waste Stabilization Facility just west of Lanai City.

Graded swales will collect and divert on-site runoff into Iwiolo Gulch on the south and into the abandoned pineapple field to the north. The site will be graded such that all structures, roads, and parking areas are set above the 100-year flood elevation of Iwiolo Gulch. The portion of the gulch passing through the southern portion of the project site will be widened to convey flood waters.

Electrical power, telephone, and cable TV service will be brought to the project site from existing systems along Lanai Avenue. All utility systems will be placed underground. Overhead lights are proposed for roadway and parking areas.

B. Economic Characteristics

The cost of the project is estimated at \$14.0 million (\$1990) for planning, design, and construction. This cost will be funded entirely by the Lanai Company as owner/developer.

Applicant proposes the rent structure shown below. The proposed rental rates would be in effect for 5 years subject to annual Consumer Price Index (CPI) adjustments and includes a Lanai Co. rental subsidy for 77 units or 60% of the total units in the project. The distribution of the subsidy has not yet been determined.

<u>Area Unit Type</u>	<u>No. of Units</u>	<u>Floor Area (SF)</u>	<u>Gross Rental</u>	<u>Lanal Co. Rental Subsidy</u>	<u>Net Rent To Tenant</u>
1 Bdrm/1 Bath	28	510	\$650	\$250	\$400
2 Bdrm/1 Bath	72	715	800	180	620
2 Bdrm/2 Bath	16	714	826	180	645
3 Bdrm/2 Bath	12	941	900	200	700

Construction will commence after all necessary approvals are received. The project will be built in two increments with the first few units in the first increment of 64 units and accessory structures available for occupancy in December, 1990 and the second increment in May, 1991.

C. Social Characteristics

No residences or businesses will be displaced by the proposed project. The dwelling units will be made available to persons of all ages, income, and ethnicity. The project is anticipated to serve the housing needs of existing Lanal residents, future in-migrating resort workers, and employees in service activities such as police, fire, government, and business.

4. Summary Description of the Affected Environment

The project site comprises an abandoned pineapple field located at the northern end of Lanal City and currently overgrown by assorted grasses, weeds, and scrub brush. Prior to the advent of commercial pineapple cultivation on Lanal in the 1920's, the site and adjoining lands were used for goat and sheep ranching (Hammatt, 1989) with Koele, immediately east of the project site, as the ranch center.

In general, the terrain is relatively level with the grade sloping gently at about 5% from northeast to southwest. Ground elevation ranges from a high of elevation 1,656 feet above sea level along Lanal Avenue to a low of 1,618 feet along the west property line.

Soils are of the Waihuna Series (Soil Conservation Service, 1972) consisting of silty clays underlain with weathered stones and pebbles. The soil is well drained, runoff is slow, permeability is moderately slow, and the erosion hazard is slight.

Most agriculturally suitable lands on Lanai including the project site are rated Unique Agricultural Land by the Agricultural Lands of Importance to the State of Hawaii (ALISH) system. Unique agricultural lands are defined as "land that has the special combination of soil quality, location, growing season, moisture supply, and is used to produce sustained high quality and or high yields of a specific crop . . .".

Flood Insurance Rate Maps (FIRM) have not been prepared for Lanai.

Iwiole Gulch, a shallow soil embankment drainage channel, runs through an adjoining lot to the south before turning and traversing across the extreme southern corner of the property.

A second drainage was observed in the northeast corner of the subject parcel where an existing culvert passes beneath Lanai Avenue and discharged runoff generally along the north property line. At the time of our field survey, runoff had gouged a channel 2 feet deep, 2 feet wide, and 200 feet long through the soft soil.

Owing to its previous use for commercial pineapple cultivation, there is no physical evidence of archaeological or cultural features on the ground surface. On site flora and fauna are common species and none are proposed for threatened or endangered status.

Located at the northern edge of Lanai City, the property seemingly lies entirely within the State Land Use Urban District. A boundary interpretation, however, has determined that approximately 7.40 acres are classified Urban and 2.26 acres Agricultural (see Figure 3). To have the project conform with applicable land use controls, applicant will request a State land use district boundary amendment from Agricultural to Urban for the 2.26 acres.

In spite of the split State land use classification, the 9.66 acre site is community planned Single-Family and Multi-Family Residential (Lanai Community Plan, 1983). Although Maui County has a zoning code, there are no zoning maps to implement the community plan maps. The entire Urban District on Lanai is currently under the County's Interim zoning ordinance. Hence the property is not zoned for multi-family use and a change in zoning is required. Toward this end, petitioner is requesting also a zone change from Urban Interim to A-1 Apartment District.

The project site does not fall within the County delineated Special Management Area and Koele Project District.

In the vicinity of the project site, water is available from either 6-inch or 8-inch lines along Lanai Avenue. Alternatively water can be extended to the site from an 8-inch line in Fraser Avenue.

Lanai City is serviced by a municipal wastewater system. Wastewater is collected within the town and gravity flows to a County maintained waste stabilization facility located immediately west of Lanai City. Both Lanai and Fraser Avenues in the vicinity of the project site are sewerred with 8-inch lines.

Lanai Avenue, which is the main north-south road through Lanai City passes to the east of the site and will be the only access route to the Waialua Multi-Family Housing subdivision. Fraser Avenue, also a north-south road paralleling Lanai Avenue, terminates before reaching the project site.

Domestic refuse is collected weekly by County of Maui refuse workers.

State, County, and private recreation facilities include Lanai Gymnasium and Tennis Courts, Lanai Community Center, Hulupoe Beach Park, Manele Beach Park, and Cavendish Golf Course (DLNR, 1985). A new community recreation complex—consisting of baseball and softball fields, jogging paths, gymnasium, recreation room, and volleyball courts—was recently constructed by Castle and Cooke.

Lanai High and Elementary School (K-12) is the only school on the island. The 30-classroom school has a 1990 school year enrollment of 479 students well under its capacity of 600 students.

The Lanai Police Station is located on 8th Street and Fraser Avenue and is staffed by six police officers.

Twenty-four hour fire protection service originates from the Lanai Fire Station located at the intersection of Kamaulapau Highway and Fraser Avenue. This County facility is manned by sixteen firefighters.

The fire station also houses an emergency ambulance and crew providing service 24 hours a day. Six emergency medical technicians are based at the station and two (2) are on duty at all times.

Electrical power for all Lanai is supplied by Maui Electric Company from its power plant in Lanai City and telephone service is provided by Hawaiian Telephone Company.

5. Summary of Environmental Impacts and Measures to Mitigate Adverse Effects

Given the paucity of natural resources and the absence of unusual physical features on the site, the project is not expected to result in significant direct environmental impacts. With the onset of construction comes the greatest physical changes to the land as vegetation will be grubbed, natural grades recontoured, and the ground surface remodeled (temporarily and permanently) to achieve design elevation for building foundations, roads and parking areas, utility lines, and landscaping. Cumulatively, these actions and the myriad of activities associated with actual building construction generally increase soil loss, surface runoff, off-site sedimentation, air and noise pollution, vehicle traffic, and construction debris. Although unavoidable, these impacts are generally temporary and can be mitigated by adhering to standard construction practices and complying with State and County environmental rules and regulations.

Iwiole Gulch will be widened where it traverses the southern portion of the project site. The planned widening will lower the projected 100-year flood elevation height and provide a factor of safety for existing houses on the opposite bank of Iwiole Gulch from being inundated by the projected 100-year flood.

Should subsurface archaeological features be unearthed during construction, work in the affected area will cease and historic authorities consulted for proper disposition of the finds.

The proposed project conforms to the desired use of the property presented in the Lanai Community Plan. The property lies within the State Land Use Urban District and only a modest expansion of same is required to accommodate the entire development. Its location in the Urban District, its multi-family designation, and its non-agricultural use for several years indicates that the property is of low agricultural value and should be put to more productive use. Developing this property will not initiate wholesale and widespread land use changes to urban type uses. Rather, the introduction of alternative economic activities and subsequent economic expansion seems to be the catalyst for change (land use and otherwise) on Lanai.

Two changes in land use designations are pre-requisites for developing the property: a State land use district boundary amendment from Agricultural to Urban for 2.26 acres of the property and rezoning the 9.66 acre parcel from Urban Interim to A-1 Apartment District. Effectuating these changes are not anticipated to significantly alter the use of adjoining lands. A boundary amendment would place the entire parcel into a single land use district. The Urban rather than Agricultural District is the appropriate district given the community's desire for multi-family residential use of the property. With respect to standards for determining Urban district boundaries: the site is close to places of economic activity and employment, it can be readily serviced by existing water, sewer, and road systems, the terrain is relatively flat and free of environmental hazards, is contiguous to an existing urban district and would not foster scattered urban development, and is planned for residential use on County plans.

A zone change to A-1 Apartment District implements the desired use of the property. The A-1 zoning fosters low-rise, low-density development that complements the rural character, physical layout, and human scale qualities of Lanai City.

Few persons would dispute the contention that with the coming of Castle and Cookes' ambitious resort developments, housing (or the lack of it) is of immediate concern to Lanai residents, community leaders, and government officials. The proposed action will not solve the perceived 'housing crisis' but in conjunction with other planned housing developments should help to balance Lanai's housing supply and demand equation. In and of itself, the Waialua Multi-Family Housing project expands available housing stock, offers individuals and families a choice of housing type, and provides rental housing opportunities for individuals and households desiring a multi-family residential environment. The project is intended to meet the housing needs of single persons, young couples, small households with children, and the handicapped regardless if they are Lanai residents or part of the in-migrating work force.

In terms of number, the 128 unit project could accommodate a tenant population of between 370 - 400 persons (at 3.04 persons per household x 128 units) a majority of whom are expected to be in-migrants. This additional population is an off-shoot of community desire to increase population (projected at 4,500 persons by 2003) in order to sustain basic community services (EDAW, 1981). In the past, cultural differences between immigrants, long-term residents, and temporary workers resulted in social tension. As stated in the Lanai Community Plan, an assimilation program for immigrants should be initiated with the objective of curtailing the chances of social history being repeated.

Existing water source and distribution systems and wastewater systems can accommodate the planned development.

Potential traffic impacts were evaluated in the context of all contemplated developments in Lanai City and in other areas of the island (Pacific Planning and Engineering, 1989: See Appendix A). Impacts are described by the concept of Level-of-Service (LOS). There are five LOS categories for gauging traffic delay. The categories range from LOS 'A' (little or no delay) to LOS 'F' (extreme traffic delay); LOS 'C' (average traffic delay) which is typical for many streets and intersections, is an acceptable level of delay. Results of the traffic analysis show that the Waialua project will not adversely affect existing levels of service. The volume of traffic to be generated coupled with already low existing traffic volumes will have little effect on roadway capacity.

It is not likely for one housing development to overtax existing public services and facilities. The proposed Walalua Multi-Family Housing project in itself will neither necessitate a decline in public service if gauged by service availability, coverage area and response time, nor place unwarranted demands for increases in service. It is anticipated, however, that the cumulative effects of several housing developments will necessitate gradual expansion of public services and facilities. For example, water and sewer systems have been (or are being) upgraded to accommodate population growth. In the long-term and as the need arises, bolstering of police and fire protection, medical services, education, and recreational facilities and programs are expected. Typically these types of services and facilities follow growth in an area on an on-demand basis.

6. Alternatives to the Proposed Action

A no action option is not reasonable considering the urgency to provide needed housing for existing residents and in-migrating employees of the two new resort hotels on the island. Locating the project elsewhere likewise is unreasonable because there is no other vacant area of comparable size with appropriate land use designations (as the Walalua site) in Lanai City targeted for development at this time.

With regards to design alternatives, an entry from Fraser Avenue (which would have been extended to the project site) was initially proposed but dropped from consideration. Traffic circulation is an important design feature in any site plan but in this instance was outweighed by the desire to maintain residential privacy, foster a sense of security, and encourage pedestrian travel.

7. Description of the Assessment Process

The scope of the project was discussed with the landowner/developer and their architectural and engineering consultants. State and County agencies were apprised of plans to develop the property and their thoughtful comments have been incorporated into the site plan and project components.

Time was spent in the field collecting data and noting conditions of the site and nearby areas. The discussions and field investigations allowed us to identify existing environmental conditions and features against which impact assessment was made.

8. Findings and Determination

Chapter 200 (Environmental Impact Statement Rules) of Title 11, Administrative Rules of the State Department of Health, contains criteria for determining whether an action may have significant effects on the environment (11-200-12). The relationship of the proposed project to these criteria is discussed below.

- (1) Involves an Irrevocable commitment to loss or destruction of any natural or cultural resource;

The site is devoid of significant natural and cultural resources.

- (2) Curtails the range of beneficial uses of the environment;

The property was used previously for cattle grazing (until the 1920s) and commercial pineapple cultivation. More recently, the site was removed from cultivation and remains vacant and untended. The site is planned for residential development and its conversion for that use is both a suitable and beneficial use of the environment.

- (3) Conflicts with the State's long-term environmental policies or goals and guidelines as expressed in Chapter 344, Hawaii Revised Statutes, and any revisions thereof and amendments thereto, court decisions or executive orders;

The proposed action does not conflict with the State's long-term environmental goals, objectives, policies, and guidelines.

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

The project will aid in averting an anticipated housing shortage on Lanai brought on by the planned opening of two resort developments in 1990. As such, its construction and completion should enhance community welfare.

- (5) Substantially affects public health;

Developing the property for housing will not affect or pose a threat to public health.

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

In conjunction with other housing projects and resort development, cumulative effects on public facilities can be expected. However, improvements to first line infrastructure (water and sewer) are in various stages of completion and can accommodate both an increase in the labor force and visitors to Lanai. As population increases, demands will be placed on parks, protective services, and schools as is typical for urban or urbanizing areas.

- (7) Involves a substantial degradation of environmental quality;

Environmental quality will not be substantially degraded.

- (8) Is individually limited but cumulatively has considerable effect upon the environment or involves a commitment for larger actions;

The project is one of several projects geared to provide housing for Lanai residents and in-migrating persons staffing two new resort developments on the island. It is an accommodating action rather than one that fosters a commitment for a larger action.

- (9) Substantially affects a rare, threatened or endangered species, or its habitat;

The site harbors no rare, threatened, or endangered species of plant or animal.

- (10) Detrimentially affects air or water quality or ambient noise levels; or

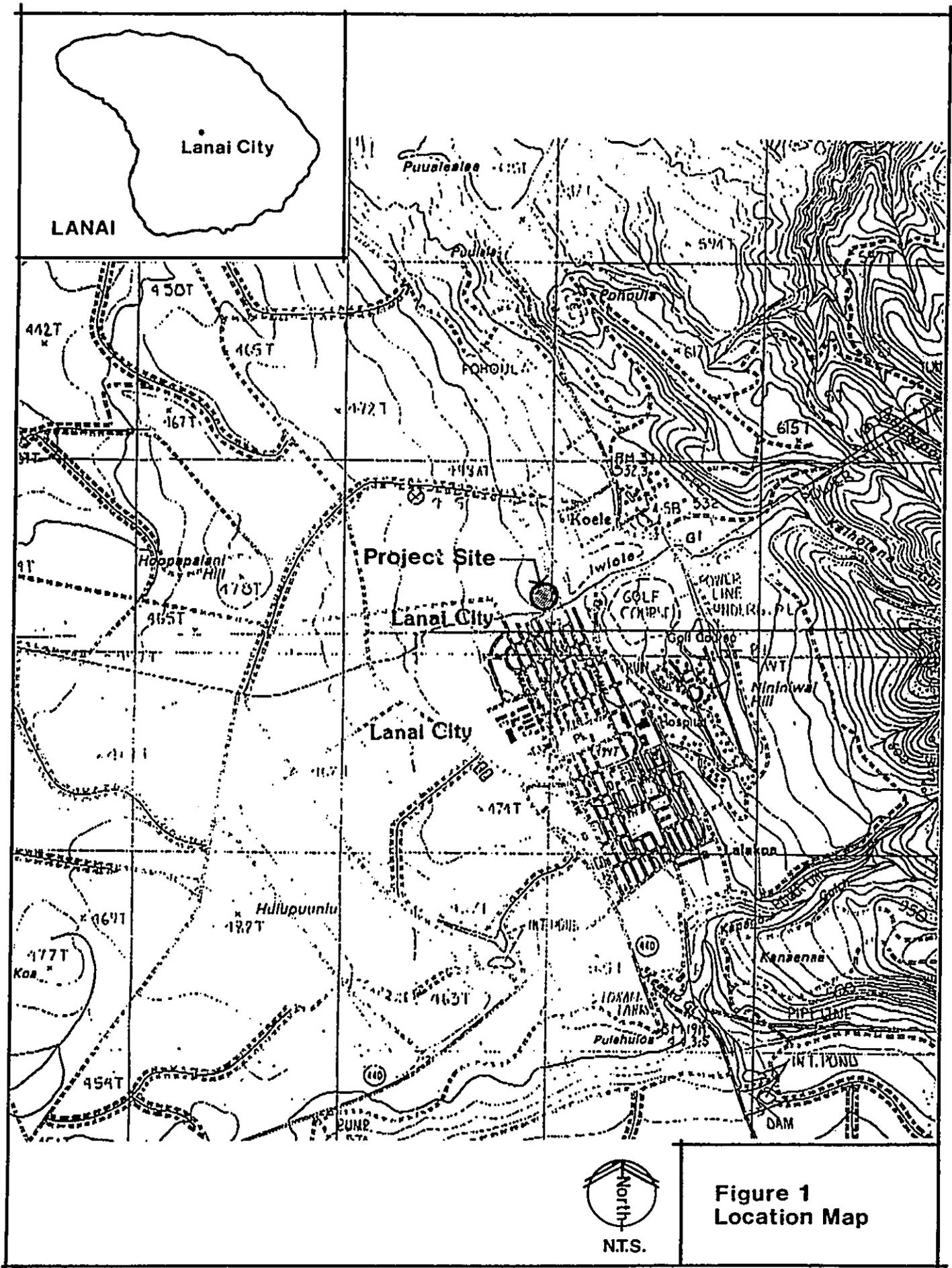
Short-term effects on air quality and the acoustical environment can be expected during construction.

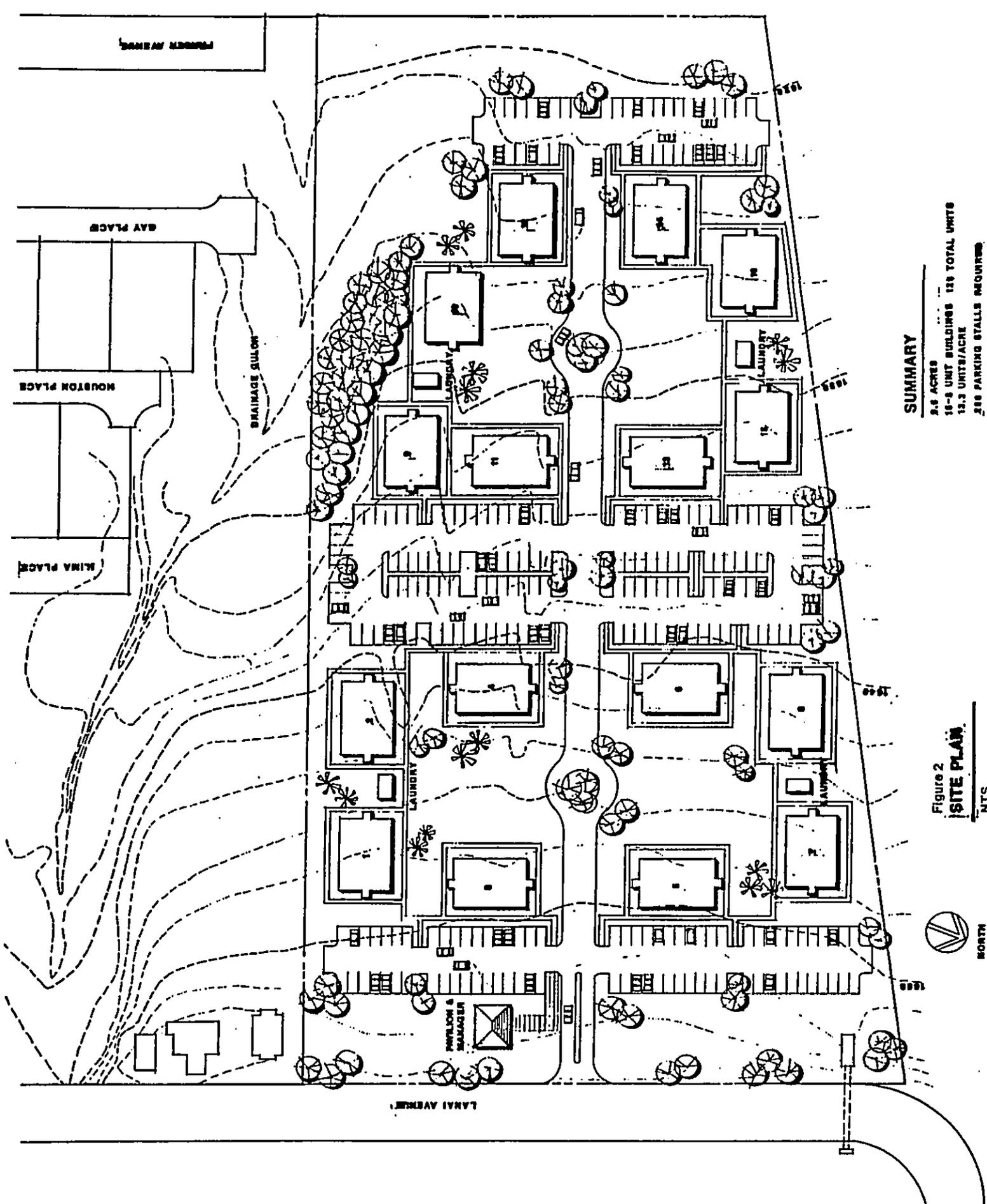
- (11) Affects an environmentally sensitive area such as a flood plain, tsunami zone, erosion-prone area, geologically hazardous land, estuary, fresh water, or coastal waters.

The project is not proposed on environmentally sensitive areas.

Base on the above criteria, it is concluded that the Waialua Multi-Family Housing project will not result in significant adverse environmental impacts and an Environmental Impact Statement is not required.

FIGURES





SUMMARY
2.9 ACRES
16-2 UNIT BUILDINGS 128 TOTAL UNITS
12.3 UNITS/ACRE
288 PARKING STALLS REQUIRED

Figure 2
SITE PLAN
N.T.S.

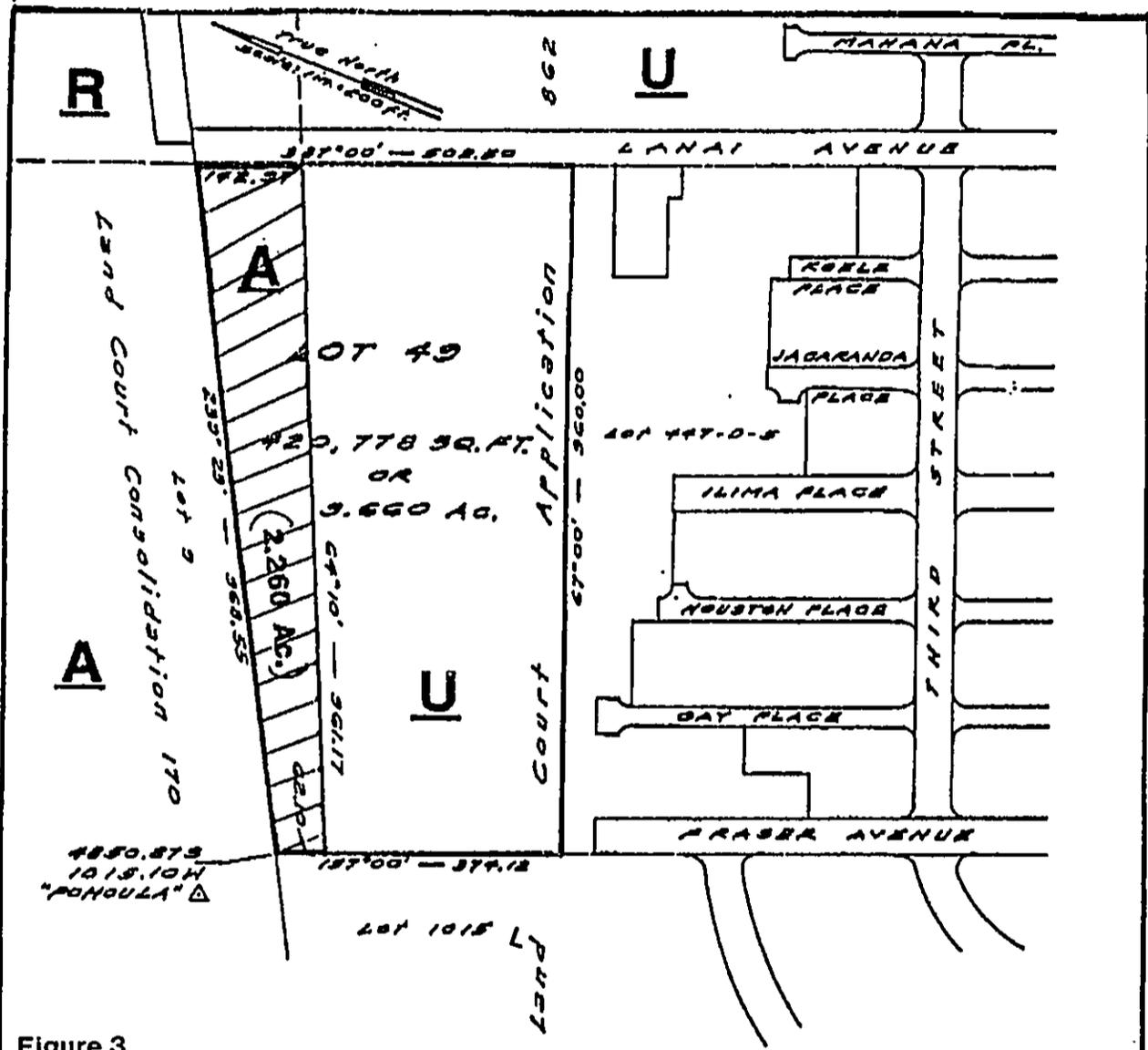


Figure 3

**PROPOSED RECLASSIFICATION
OF
STATE LAND USE DISTRICT**

**FROM AGRICULTURAL
TO URBAN (2.260 ACRES)**

LANAI CITY, LANAI, HAWAII
TAX MAP KEY: 4-09-08:13



M&E PACIFIC, INC.
This work was prepared by me or under my supervision

Laurance M. Masuda
Registered Land Surveyor
Certificate No. 4722