

DEPARTMENT OF WATER

County of Kauai

"Water has no Substitute -- Conserve It!"

February 10, 1997

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FEB 11 P3:16

Mr. Gary Gill
Office of Environmental Quality Control
220 S. King Street, 4th Floor
Honolulu, HI 96813

OFFICE OF ENVIRONMENTAL
QUALITY CONTROL

Dear Mr. Gill:

SUBJECT: Negative Declaration for Proposing Reservoir and Transmission Line,
Department of Water, County of Kauai, Nawiliwili, Kauai; TMK:3-3-03:1,
Fourth Division

The Department of Water, County of Kauai, has reviewed the comments received on the Draft Environmental Assessment during the 30-day public and agency comment period, which began on November 8, 1996 and has assessed the project in terms of the significance criteria as provided in Hawaii Administrative Rules, Section 11-200-12. This agency has determined that the project will not have significant environmental effects and has issued a Negative Declaration. Please publish this notice in the February 23, 1997 Environmental Notice.

We have enclosed a completed Environmental Notice Publication Form and four(4) copies of the Final EA. Should you have any questions regarding this submittal, please contact our consultant, Mr. Glen Koyama of Belt Collins Hawaii at (808) 521-5361.

Sincerely,



Ernest Y. W. Lau
Manager and Chief Engineer

cc: Glen Koyama, Belt Collins Hawaii

Enclosures: Negative Declarations (4 copies)
The Environmental Notice Publication Form

1997-02-23-KA-PEA-Nawiliwili
Water Reservoir & Transmission Line

FEB 23 1997
FILE COPY

**FINAL
ENVIRONMENTAL ASSESSMENT**

**LIHUE 1.0 MG (NAWILIWILI) RESERVOIR
AND TRANSMISSION LINE
LIHUE - NAWILIWILI WATER SYSTEM**

February 10, 1996

Proposing Agency

Department of Water
County of Kauai

Consultant

Belt Collins Hawaii
Honolulu, Hawaii

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I. INTRODUCTION

PROPOSING AGENCY

The Department of Water, County of Kauai, is the proposing agency. The Harbors Division, Department of Transportation, State of Hawaii, is participating with the Department of Water in the funding of the project.

ACCEPTING AUTHORITY

The Department of Water, County of Kauai, is the accepting authority.

PURPOSE OF DOCUMENT

This document discloses information on the proposed action and its anticipated impacts on the environment. The proposed action is an agency action subject to Section 11-200-9 of the Environmental Impact Statement Rules, Title 11, Chapter 200, Department of Health, State of Hawaii, pursuant to Chapter 343, Hawaii Revised Statutes.

II. AGENCIES CONSULTED

STATE AGENCIES

Highways Division, Department of Transportation
State Historic Preservation Division, Department of Land and Natural Resources

COUNTY AGENCIES

Planning Department
Public Works Department

COMMUNITY

Grove Farm Co., Inc.
Phil Hilacion, Ulu Ko Subdivision Resident

III. DESCRIPTION OF THE PROPOSED ACTION

PROJECT LOCATION

The proposed action calls for construction of a 1.0 million gallon reservoir on an approximately 1.0-acre site in Lihue, Kauai within the Puakea Golf Course and a transmission line along Nawiliwili Road and Niumalu Road (See Figures 1 and 2). The Tax Map Key for the site is 3-3-03: 1, Nawiliwili Road and Niumalu Road.

Prior to the development of the existing golf course, the project site was previously leased to the Lihue Plantation Co., Ltd. for sugar production. It is currently owned by the Grove Farm Co., Inc. and is slated for transfer, in fee, to the Department of Water upon subdivision of the reservoir site from the golf course property.

STATEMENT OF OBJECTIVE

The objective of the proposed project is to provide additional storage and transmission capacity to the Department of Water's existing water system in Nawiliwili. The primary benefit from this improvement is the provision of adequate fire protection for the Nawiliwili-Niumalu area and the State's harbor facilities in Nawiliwili Bay.

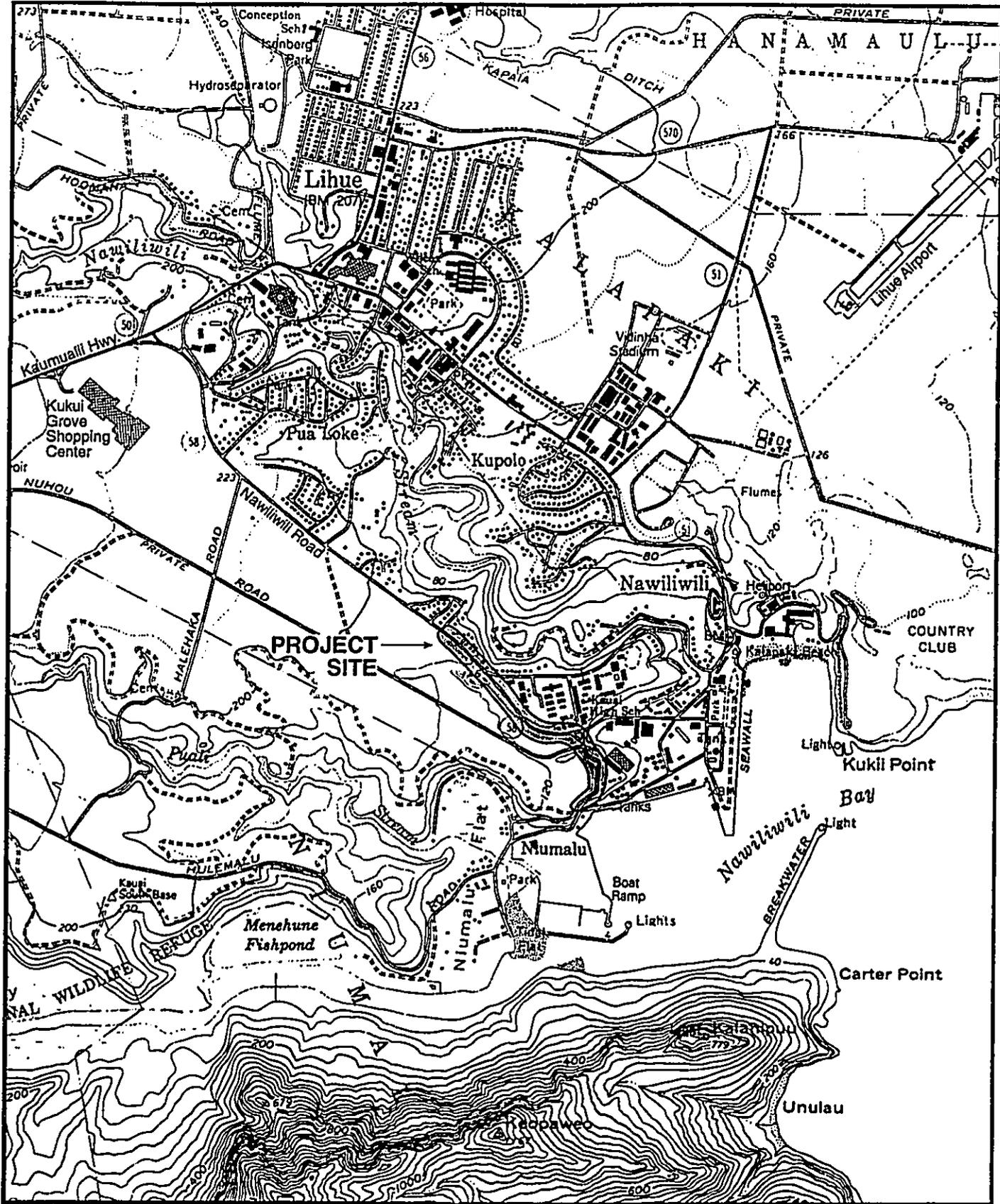
EXISTING CONDITION

As stated in the *1990 Kauai Water Use and Development Plan*, Lihue will require the greatest amounts of water on the island by the year 2010. As a result, the development plan proposes new source development projects to meet the area's water demand for the next twenty years. In addition to wells and pipe lines, the plan proposes five new reservoirs.

Existing water in the Nawiliwili area is supplied by two 100,000 gallon reservoirs, identified as the Grove Farm Tanks, and a 250,000 gallon tank, identified as the Kauai Inn Reservoir. The Grove Farm Tanks have a spillway elevation of 295 feet.

The source of the Nawiliwili water is the wells and tunnels located in the Hanamaulu hydrologic unit. This water resource area has approximately 40.0 million gallons per day of sustainable yield from ground water. The projected ground water withdrawal from this hydrologic unit is expected to reach 7.55 million gallons per day by the year 2010.

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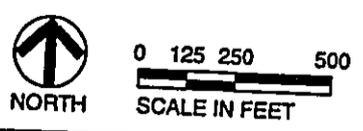
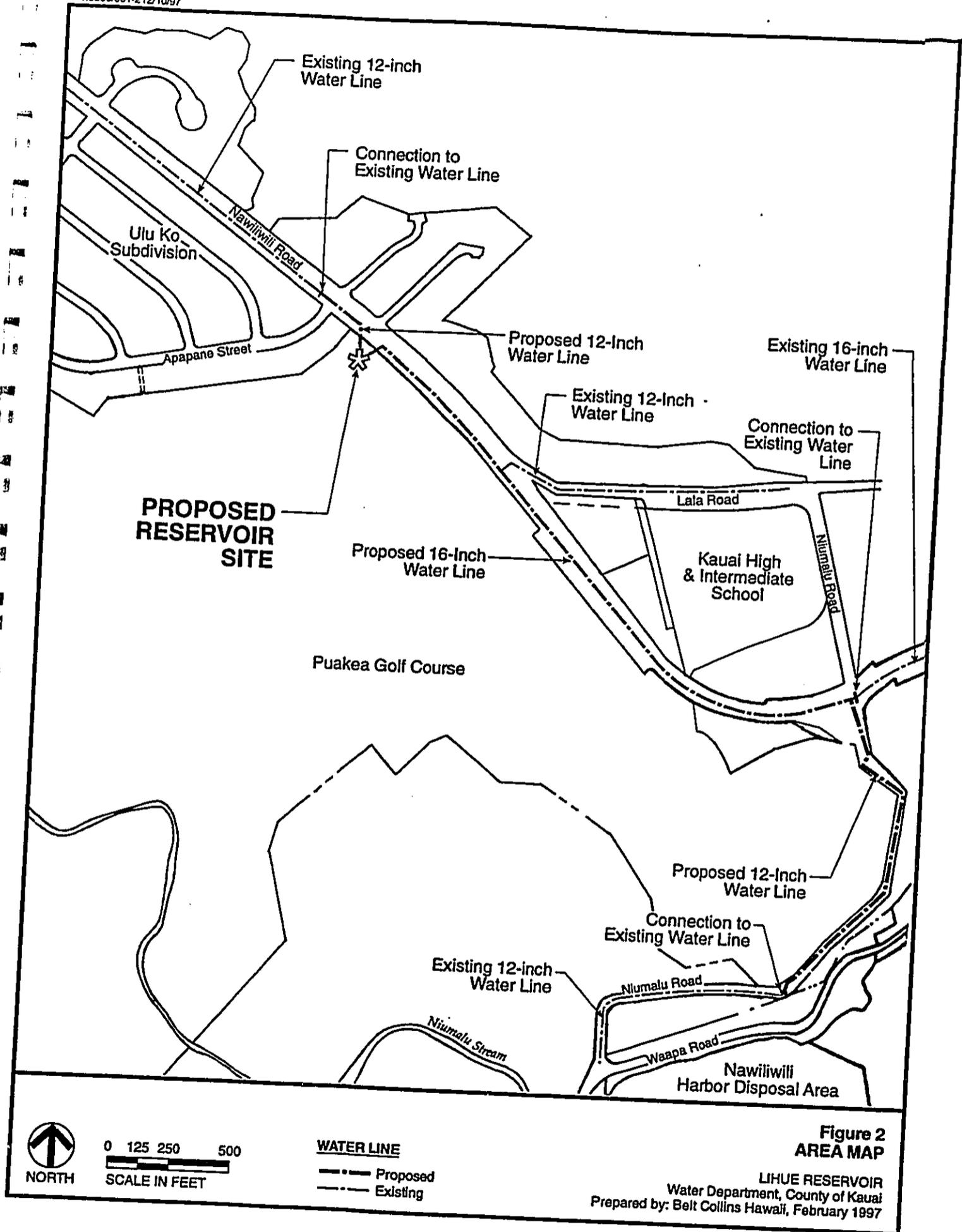


0 500 1000 2000
SCALE IN FEET

Figure 1
LOCATION MAP

LIHUE RESERVOIR
Water Department, County of Kauai
Prepared by: Belt Collins Hawaii, February 1997

441.0800/001-2 r2/10/97



WATER LINE
- - - Proposed
- - - Existing

**Figure 2
AREA MAP**
LIHUE RESERVOIR
Water Department, County of Kauai
Prepared by: Belt Collins Hawaii, February 1997

The proposed project will add one million gallons to the system's total storage capacity. This proposed addition will improve the service of domestic water and fire protection to those customers in Nawiliwili as well as to the State harbor facilities in Nawiliwili Bay.

PROJECT DESCRIPTION

The Department of Water is proposing to construct with cost sharing from the Harbors Division a one-million gallon reservoir on an approximately 1.0-acre site along Nawiliwili Road in the Puakea Golf Course site and a transmission line along Nawiliwili Road and Niumalu Road (See Figures 2 & 3). The line will consist of a 12-inch diameter ductile iron pipe from Apapane Street to the reservoir, a 16-inch line from the reservoir to Niumalu Road and a 12" line along Niumalu Road to the Niumalu Road (Pressure Reducing Unit) Station. At the Nawiliwili Road - Niumalu Road intersection, a connection will be made to an existing 16-inch waterline previously installed by the State Harbors Division.

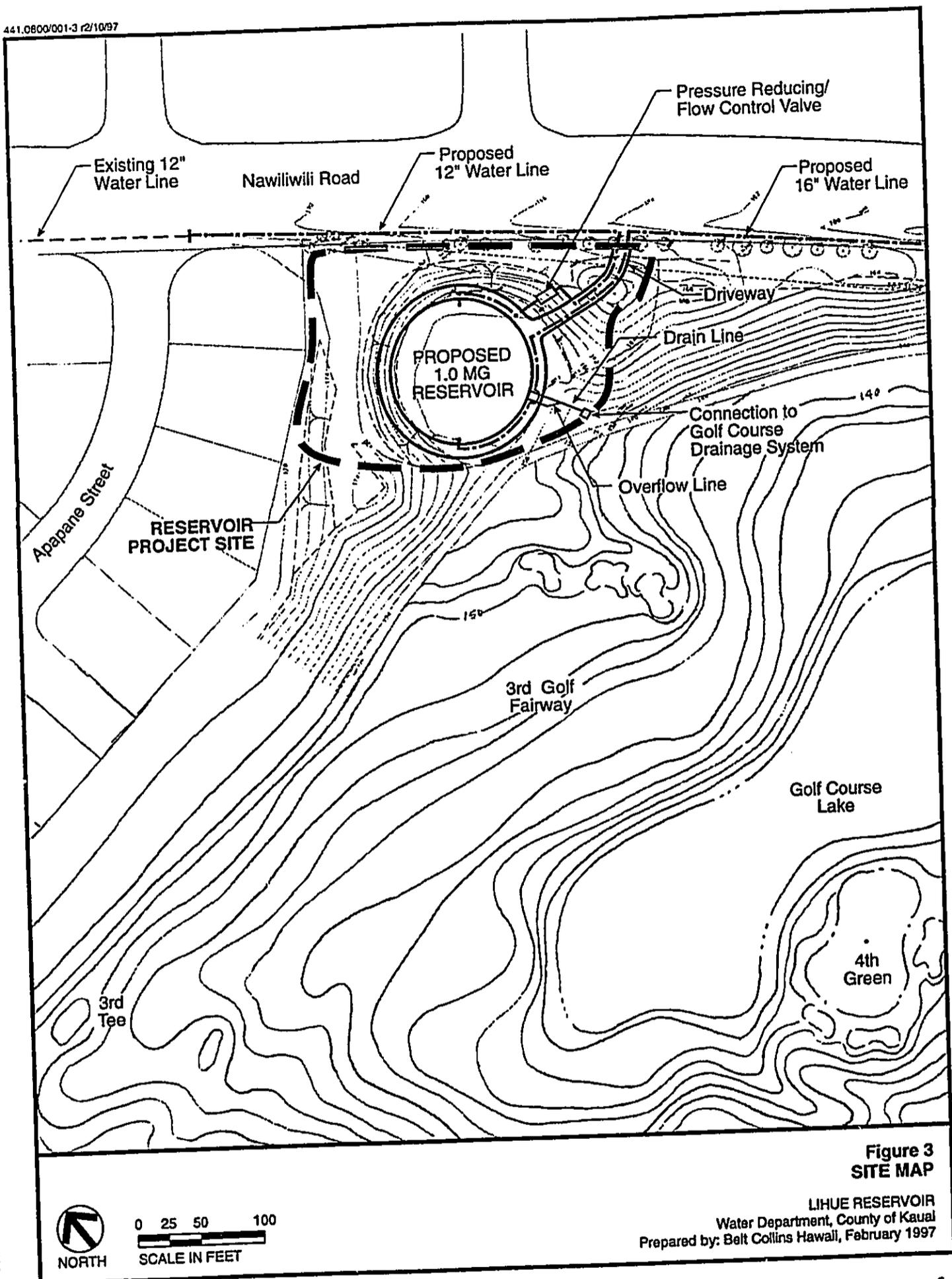
Reservoir and Appurtenance

The 1.0 MG reinforced concrete reservoir will have a spillway elevation of 173 feet. This has been set to equal the Department's existing Kauai Inn Reservoir which services the same pressure zone. The floor elevation of the reservoir will be at about 157 feet. The roof elevation will be about 175 feet, approximately the same elevation as the existing ground of the adjacent residential lots. The height of the reservoir from finish grade will be approximately 20 feet. Its inside diameter will be approximately 104 feet, and its outside diameter to the footing pad edge will be 110 feet. An earth-tone color is planned for the exterior of the reservoir.

A 12-inch drainline and 16-inch overflow pipe will be installed from the reservoir to the existing golf course drainage system. This drainage system has adequate capacity to accommodate the reservoir discharge.

The 1.0-acre site will have landscaping with irrigation and a perimeter fence. Selected indigenous groundcover will be used on the slope behind the reservoir for erosion control, and low shrubs will be planted on the top of the slope for both erosion control and visual screening. Flowering trees will be used on the golf course side of the site for aesthetic accent and partial visual screening.

A driveway from Nawiliwili Road will provide maintenance vehicle access into the site.



Transmission Line along Nawiliwili Road

Approximately 4,600 feet of ductile iron pipe will be installed along Nawiliwili Road and Niupalu Road. The proposed pipe will have a 12-inch diameter from Apapane Street to the reservoir, 16-inch diameter from the reservoir to Niupalu Road and 12-inch diameter along Niupalu Road to the pressure reducing station. It will be located just off the pavement on the golf course side of Nawiliwili Road and parallel to an existing 12-inch pipe. Along Niupalu Road, the waterline will be within the existing right-of-way starting on the makai side of the road pavement crossing over to the mauka side and then back to the makai side near the pressure reducing station. A large segment of the line on the mauka side of the road will require placement in the pavement section of the road. The existing pipe along Nawiliwili Road will be kept intact to continue its service of the area's 295-foot pressure zone.

DEVELOPMENT SCHEDULE

After the requisite permits are obtained, the proposed project is expected to be in construction for approximately 12 months. Construction is anticipated to begin in early 1997 and be completed in early 1998.

DEVELOPMENT COST

The estimated construction cost of the project is \$2.2 million in 1996 dollars.

IV. RELATIONSHIP TO PUBLIC LAND USE PLANS AND POLICIES

CONSISTENCY WITH STATE LAND USE LAW

State Plan

The proposed project is consistent with the following objectives and policies of the Hawaii State Plan, as provided in Chapter 226 of the *Hawaii Revised Statutes*.

Objectives and Policies for Facility Systems - Water

(a) Planning for the State's facility systems with regard to water shall be directed towards achievement of the objective of the provision of water to adequately accommodate domestic, agricultural, commercial, industrial, recreational, and other needs within resource capacities.

(b) To achieve the facility systems water objective, it shall be the policy of this State to:

Assist in improving the quality, efficiency, service, and storage capabilities of water systems for domestic and agricultural use.

The proposed water storage tank will improve the existing water system by providing additional storage capability for fire protection in the Nawiliwili-Niumalu area and harbor facilities area of Nawiliwili Bay.

State Land Use District

The reservoir site is currently designated Urban according to the State Land Use District maps. Land use regulations pursuant to the project site are thus under the jurisdiction of the County of Kauai.

Hawaii Coastal Zone Management Act

Below, the proposed project is discussed in relationship to the ten Coastal Zone Management Program objectives and associated policies.

Recreational Resources:

This CZM objective and its related policies are to provide coastal recreational opportunities accessible to the public. The proposed project will not interfere with public access to the shoreline nor negatively affect the coastal recreational resources of Nawiliwili.

Historic Resources:

The CZM objective and related policies concerning historic resources strive to protect, preserve, and, where desirable, restore those natural and man-made historic and prehistoric resources in the CZM area that are significant in Hawaiian and American history and culture. The proposed project will occur in areas already developed and is not anticipated to impact any archaeological or historic sites. If any archaeological features are uncovered during construction, work will cease in the immediate area and not resume until clearance is obtained from the appropriate State and County agencies.

Scenic and Open Space Resources:

This objective and its related policies strive to protect, preserve, and where desirable, restore or improve the quality of coastal scenic and open space resources. The proposed reservoir will be located more than 3,100 feet from

the shoreline and will not be in the ocean or shoreline view plane of motorist travelling on the nearest coastal highway. The undergrounding of the proposed waterline will further help to avoid interference with existing view corridors.

Coastal Ecosystems:

This objective and its related policies are intended to protect valuable coastal ecosystems from disruption and to minimize adverse impacts. The proposed project is located in the mauka land above Nawiliwili Bay and does not occupy areas which are within the coastal ecosystems of Nawiliwili. No direct impact is anticipated on the shoreline environment.

Economic Uses:

This objective and its related policies are intended to provide public or private facilities and improvements important to the State's economy in suitable locations. The proposed reservoir and transmission line are designed to support fire protection in the Nawiliwili-Niumalu area. This includes residential homes near the coast as well as the State harbor facilities in Nawiliwili Bay.

Coastal Hazards:

The coastal hazards objective and its related policies are intended to reduce hazard to life and property from tsunamis, storm waves, stream flooding, erosion, and subsidence. The proposed project is located outside of the tsunami inundation zone and is not subject to potential storm waves. Additionally, its transmission line will be installed underground and will not be damaged by stream flooding or erosion.

Managing Development:

This CZM objective and its related policies are intended to improve the development review process, communication, and public participation in the management of coastal resources and hazards. Public participation is integral to the environmental analysis and review process required by Chapter 343, Hawaii Revised Statutes. This document has been prepared in accordance with this environmental law.

Public Participation:

This CZM objective and policies relate to stimulating public awareness, education, and participation in coastal management. The State

environmental review process, under Chapter 343, HRS, provides for public notification, public comments, and community input in the review and decision process. Resource management is one of the issues taken into consideration during the environmental review process.

Beach Protection:

This objective and policies relate to the protection of beaches for public use and recreation. The proposed reservoir will be located more than 3,100 feet from the shoreline. The new water line will be located more than 150 feet from the shoreline. These installations will not directly impact any beach or shoreline areas.

Marine Resources:

This objective and policies relate to implementing the State's ocean resources management plan. This plan is not applicable to the proposed project.

CONSISTENCY WITH COUNTY PLANS AND POLICIES

County of Kauai General Plan

The reservoir site is currently designated Urban Mixed Use according to the County of Kauai General Plan. The proposed project is consistent with this General Plan designation.

Lihue Development Plan

The reservoir site is currently designated Agriculture according to the Lihue Development Plan. The proposed project is consistent with the policies of this County land use document.

County Zoning

The reservoir site is located within the Open Zoning District of the County of Kauai. Within this district, a Class IV Zoning Permit and Use Permit are required for new utility facilities. Thus, these permits must be issued prior to construction of the proposed project.

Special Management Area

The reservoir site and proposed waterline along Nawiliwili Road are located outside of the Special Management Area (SMA), and therefore, are not subject

to the SMA Rules and Regulations of the County of Kauai. The proposed water line along Niimalu Road, however, is partially within the SMA, but according to the SMA Rules and Regulations, work on utility lines within an existing right-of-way is exempted from the regulations and therefore not subject to the SMA review.

Subdivision

The proposed project will be subject to the Subdivision Rules and Regulations of the County of Kauai. Prior to the operation of the reservoir, the golf course property will be subdivided to create an approximately 1.0-acre parcel for the new water tank. The new parcel would then be transferred in fee to the Department of Water.

Road Right-of-Way

Nawiliwili Road is a State right-of-way. Installation of the proposed water line within this right-of-way will require approval from the Highways Division of the State Department of Transportation. Installation of the water line within Niimalu Road, a County right-of-way, will require approval from the County Public Works Department.

V. ENVIRONMENTAL CHARACTERISTICS

EXISTING LAND USE

The reservoir site is located along Nawiliwili Road within the Puakea Golf Course. It is bounded on the southern side by the third fairway of the existing golf course and on the northeastern side by the two-lane State road. The site was previously rough graded as part of the golf course construction. Other adjacent land uses include a residential community across Nawiliwili Road and a residential subdivision adjacent to and northwest of the project site (See photo survey in Appendix).

The new 4,600-foot water line will be located within the shoulder area of the Nawiliwili Road right-of-way and the shoulder and pavement area of the Niimalu Road right-of-way. The proposed alignment has already been graded and to some extent overgrown with roadside vegetation.

Negligible impact is expected on the adjacent land uses since the proposed utility is a passive and compatible use.

PHYSIOGRAPHY

The proposed reservoir site was previously rough graded as part of the golf course construction. It is situated at approximately the 157-foot elevation with its mauka boundary at approximately the 175-foot elevation.

Construction of the proposed reservoir will require additional earthwork to provide the finish grade for the site. This final grading is expected to be minimal since rough grading is already completed.

The proposed water line in the Nawiliwili Road and Niunalu Road rights-of-way will not require change to the existing topography. The line will be buried within the shoulder or pavement of the existing right-of-way.

SOILS

The U.S. Soil Conservation Service has identified the soil on the reservoir site as Lihue Silty Clay, 0 to 8 percent slopes (LhB), comprising of a dusky-red silty clay with a thickness of about 12 inches. Beneath this layer is a dark-red and dark reddish-brown, compact silty clay with a thickness of about 48 inches. The substratum is a layer of soft, weathered rock.

Permeability of the soil is moderately rapid. Its runoff characteristic is slow, and its erosion hazard is no more than slight. According to the U.S. Soil Conservation Service, the soil's Capability Classification is "Ile", which indicates the soil has moderate limitations that reduce the choice of plants that can be cultivated or that the soil will require moderate conservation practices to make it useable. The soil's primary limitation is its susceptibility to moderate erosion if it is cultivated and not protected.

Notably, the project area was previously in sugar cane production before golf course use took over.

HYDROLOGY

There are no natural water features or distinct drainageways on the reservoir site. Surface runoff currently flows from north to south following the existing terrain. From the project site, runoff flows over the adjacent golf course and into its drainage system. Ultimately, the flow discharges into an existing irrigation lake at the third golf hole as shown on Figure 3.

Runoff from the residential properties above the reservoir site flows into the existing street drainage system.

During construction, potential erosion and sedimentation may occur. The extent to which these impacts will occur would be minimal since the site has already undergone preliminary site preparation.

Installation of the water line along Nawiliwili Road and Niumalu Road will occur below grade and not alter the existing roadway drainage pattern which currently comprises of swales and natural drainage channels on the adjacent land. Runoff from these drainageways ultimately discharges into Nawiliwili Bay at the State harbor facilities. Precautions will be taken to minimize runoff and sedimentation during construction.

During construction of the reservoir, the interior of the structure will go through a disinfection process involving some form of chlorine spray-on. The spray-on application will then be chemically neutralized before the reservoir is filled with potable water for domestic use.

The proposed 4,600-foot water line along Nawiliwili and Niumalu Roads will be disinfected and hydrotested before it is put into use. The discharge from the testing would be collected and hauled away by truck or by some other proper disposal method as determined by the contractor. A National Pollutant Discharge Elimination Systems (NPDES) Permit is not expected to be required for this project.

FLORA

The project site is already rough graded, and all previous vegetation have been removed. Weeds and other groundcover species have only recently taken over the site.

The reservoir property will be landscaped once construction of the water storage facility is completed. Some trees have already been planted on the golf course and along the Nawiliwili Road frontage of the site.

The proposed project will include the installation of approximately 4,600 feet of water line along the Nawiliwili Road right-of-way from Apapane Street to Niumalu Road. It will be buried adjacent to the road pavement on the golf course side of the right-of-way and parallel to an existing 12-inch water line. This utility alignment will be located in the graded shoulder of the right-of-way which is presently occupied by grass, roadside trees, utility poles, and guard rails. Along Niumalu Road, the proposed waterline will be installed in the shoulder or pavement of the right-of-way. The shoulders are currently bare of vegetation or only minimally covered with grass. The new water line will not impact any endangered or threatened plant species.

FAUNA

The project site is frequented by various types of birds which are common to the island. The proposed action is not expected to significantly impact existing fauna since birds are highly mobile and would avoid the project site during construction. Once construction and landscaping are completed, avifaunal species are expected to return to the area and resume their normal activity. Other wildlife species, including stray mammals, are not expected to be adversely impacted.

ARCHAEOLOGICAL SITES

In a study by Paul H. Rosendahl, Ph.D., Inc. (PHRI), entitled Archaeological Inventory Survey, Grove Farm Lihue/Puhi Project Area, the proposed reservoir site was surveyed and no archaeological features were discovered. The survey site was part of a larger study area which covered approximately 590 acres of Grove Farm property. The survey was conducted in three phases: 1988, 1989, and 1991.

Previous archaeological studies by PHRI, Cultural Surveys Hawaii and Bishop Museum (on file at the State Historic Preservation Division office) were conducted on the surrounding lands. These studies revealed that Nawiliwili is similar to that of other areas where sheltered coastal bays and river valleys were desirable places to live for the early Hawaiians because they provided easy access to marine resources and the resources of river valleys.

During the area's historic period, cultural features were predominantly utilitarian associated with the production of sugar cane. Occupation of this area is well documented and typically represents historic habitation and transportation. The cultivation of sugar cane has continued in the project vicinity to the recent past.

Modern settlement has recently occurred bringing public roads, residential housing, golf course, industrial uses, and public facilities to the area. Notably, there are no known archaeological, cultural, or historical sites existing on the project site. The proposed reservoir site was graded as part of the golf course construction and was previously in sugar cane. The Nawiliwili Road and Niumalu Road rights-of-way, where the new transmission line is to be located, are already improved and are not expected to contain any archaeological or historic features.

NATURAL HAZARDS

The reservoir site is not located in a flood hazard area. According to the Federal Emergency Management Agency flood maps (FEMA, 1990), the site is situated in an area designated "Other Areas, Zone X" which is determined to be outside of a 500-year flood plain. Other natural hazards, such as brush fire and subsidence, are not expected to occur in the vicinity.

VIEWS

The reservoir site is located along Nawiliwili Road and within the Puakea Golf Course. Separating the proposed reservoir and the existing public road is an approximately 3-foot high landscape berm. This berm will provide a partial screen for the proposed storage facility. It is estimated that only 6 to 7 feet of the top portion of the reservoir will be visible to passing motorists.

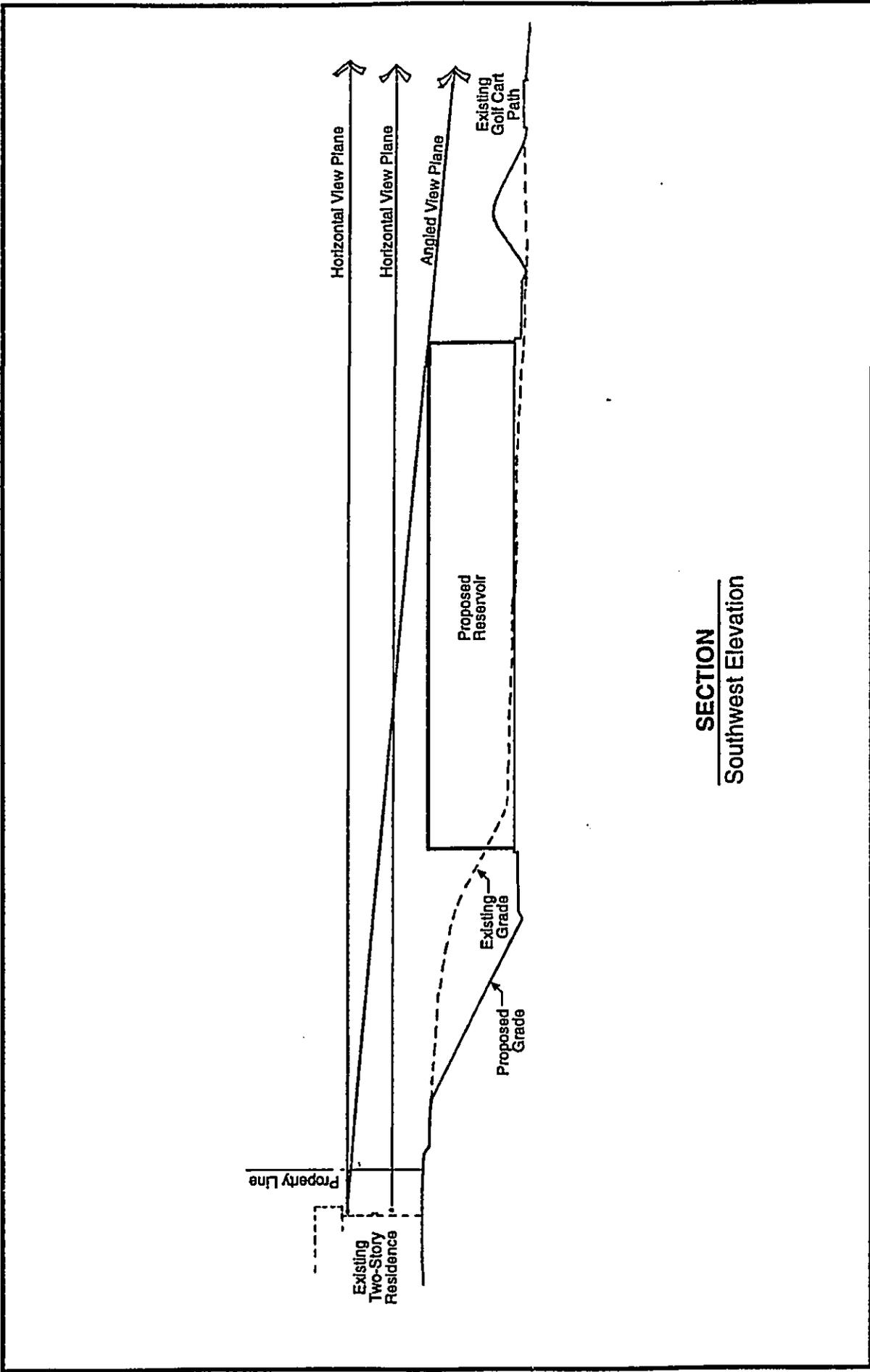
Mauka of the proposed reservoir are residential homes. Two residences, in particular, are located immediately behind the proposed storage tank. Current plans call for the proposed reservoir to sit on the site below the original grade. With a top elevation of approximately 175.3 feet, the roof of the reservoir will be approximately at the same level as the ground elevation of the adjacent residences (see Figure 4). Horizontal view planes toward the Keopaweo Mountain from eye level of an individual standing on the first or second floor of the adjacent dwelling unit will not be obstructed. Additionally, the reservoir will be positioned between the two residences. The occupants of the residences, thus, will have a clear view of the makai lands from at least 45 percent to one-half of their rear property line.

The reservoir will be most visible from the golf course. The direction of golf play on the adjacent fairway and its view orientation, however, will be toward the opposite direction of the water tank. Moreover, there will be landscape trees and mounds bordering the golf course to provide a visual screen.

NOISE AND AIR

The primary source of noise in the area is vehicular traffic on Nawiliwili Road. When the new golf course is opened for play, other sources will include golf course maintenance noise generated by lawn mowers and golf course irrigation and sprinkling.

In the short-term, the proposed project will be the source of temporary noise. Earthmoving equipment will be used to shape the final grade for the project site and heavy trucks will be used to haul construction equipment and material to and from the property. Although construction is projected to



SECTION
Southwest Elevation

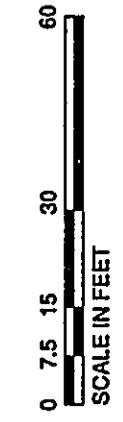


Figure 4
ELEVATION PLAN & VIEW ANALYSIS
 LIHUE RESERVOIR
 Water Department, County of Kauai
 Prepared by: Belt Collins Hawaii, February 1997

occur over 12 months, the actual grading work will be approximately 2 to 3 months at the reservoir site and 6 months on the installation of the water line along Nawiliwili and Niumalu Roads. Construction of the reservoir will take approximately 6 to 8 months (some overlapping of construction activities will occur).

Construction equipment used on the project would include a crane, backhoes, a grader, a compactor, jack hammers, a paver, and concrete trucks. These equipment will not be operating all at one time but during different phases of the project. Once construction of the reservoir is completed, on-site noise levels will be greatly reduced.

There are no sources of major air pollutants in the area. Vehicular traffic on Nawiliwili Road generate some emissions pollutant, but they are insignificant. The lands around the reservoir property are in residential, golf course and open space uses which are relatively non-polluting uses.

In the short-term, construction dust will be generated during the site preparation stage. This would occur during the grading of the reservoir site, trenching and backfilling for the reservoir drain and overflow lines, and trenching and backfilling for the transmission line along Nawiliwili and Niumalu Roads. A number of mitigation measures could be employed to reduce dust impacts on adjacent properties, and these will be discussed in a later section of this Environment Assessment. No dust or air pollutants are expected to be generated by the proposed project during its operational stage.

VI. INFRASTRUCTURE

CIRCULATION AND TRAFFIC

A 12-foot wide maintenance driveway will provide access into the reservoir site from Nawiliwili Road. The latter State right-of-way extends 2.2 miles and connects Kaumualii Highway and Nawiliwili Harbor.

In the short-term, traffic levels will increase slightly during the construction phase of the reservoir and transmission line. During this period, heavy vehicles will transport construction equipment and material to and from the site. It is anticipated the generated traffic will occur throughout the day over normal working hours to avoid any measurable impact on peak hour traffic.

During installation of the water line along Nawiliwili Road and Niumalu Road, one lane may be coned and closed to traffic. This would likely be scheduled during non-peak hours of the day. Flagmen will be on duty to direct traffic as efficiently as possible through the area.

Negligible increases in traffic levels are expected during the reservoir's operational stage. Periodic site visits (approximately 2 to 4 times per month) will be made by Department of Water maintenance and landscape personnel.

WATER

The existing water in Nawiliwili is supplied by two Department of Water reservoirs (known as the Grove Farm Tanks). They have a combined storage capacity of 200,000 gallons and a spillway elevation of 295 feet. The source of this water is the wells and tunnels in the Hanamaulu hydrologic unit. Its sustainable yield is approximately 40.0 million gallons per day. The projected ground water withdrawal from this area is expected to reach 7.55 million gallons per day by the year 2010.

The proposed project will add one million gallons to the total storage capacity of the Lihue-Nawiliwili system. It will improve the service of domestic water and fire protection to those customers in the Nawiliwili area as well as to the State harbor facilities in Nawiliwili Bay.

As a user, the reservoir facility will require approximately 3,300 gallons of water per day for landscape irrigation. No other water needs are required for the project.

SEWER

There are no sewage collection or disposal needs for the project. Thus, there will be no impact on the County sewer system.

ELECTRICITY

Electrical power will be required to operate the reservoir's water level recorder. The power demand from this operation will be minimal. The reservoir's mechanical switching gear for the drainline and overflow line will be operated by a hydraulic system.

TELEPHONE

The proposed project will utilize telemetering alarms which connect to the Lihue Fire Station via a conventional telephone line. The low anticipated usage of the telemetering alarms will have negligible impact on the local telephone system.

VII. SOCIO-ECONOMIC CHARACTERISTICS

DISPLACEMENT OF EXISTING FACILITIES

The reservoir site was rough graded as part of the golf course construction and is now in use by the Department of Water for its proposed 1.0 MG reservoir. No existing facilities, including residential homes, are being displaced or relocated by the proposed project.

GENERATED EMPLOYMENT

The proposed project is not anticipated to have a direct, major effect on the local economy, such as increased jobs or increased demand for local businesses and services. There will be, however, a short-term source of employment during the project construction period. The employment impact will be small and possibly result in no new job creations, but merely in the mobilization of existing construction labor pools.

GENERATED SECONDARY ECONOMIC IMPACTS

Considering the small size of the proposed project, it is anticipated there will be nominal secondary economic impacts in the community such as minor increases in personal income, spending in retail and wholesale outlets, and government revenues from personal income, excise taxes and real property taxes.

IMPACT ON PUBLIC SERVICES

Nawiliwili is a suburban community that has access to public services including health care, police, fire, recreational and educational facilities.

The proposed project will not increase the burden on the area's public services and facilities. It, in fact, will improve service to the area. The new reservoir will increase the water system's storage capacity and provide increased water availability for fire protection and domestic use in the Nawiliwili area.

VIII. SUMMARY OF MAJOR ADVERSE IMPACTS

LONG-TERM IMPACTS

During the operational stage of the project, it is anticipated that the following impacts will occur including some irreversible and irretrievable commitment of resources:

- o Loss of the site for future alternative uses,
- o Change in visual condition of the project site,
- o Irretrievable loss of fiscal resources expended during the planning, construction, and operations phase of the proposed facility, and
- o Use of water for landscape irrigation and manpower for long-term maintenance.
- o Use of electrical power for the reservoir's water level recorder.

Though there are some irreversible and irretrievable commitment of resources, the long-term beneficial effects of the proposed project more than offset the negative impacts.

SHORT-TERM IMPACTS

During the construction stage of the project, it is anticipated the following impacts will occur:

- o Temporary increase in soil erosion from site grading work,
- o Temporary increase in noise and fugitive dust, and
- o Temporary and occasional impacts to local traffic.

IX. ALTERNATIVES CONSIDERED

NO ACTION

The "no action" alternative would result in no additional storage or transmission capacity for the Department of Water's Lihue-Nawiliwili water system and thus a continuance of inadequate fire protection for the Nawiliwili Harbor area. This alternative is not consistent with the *1990 Kauai Water Use and Development Plan*. The no action alternative, therefore, is not a viable option.

ALTERNATIVE SITE

The proposed project site is the most appropriate location. It is in close proximity and provides a direct connection to the existing pipeline in

Nawiliwili Road and the State Harbors Division's facilities in Nawiliwili Harbor.

X. PROPOSED MITIGATION MEASURES

Although the long-term impacts of the proposed action are considered beneficial, other impacts are expected to occur which would be considered negative. Mitigation measures will be employed, when warranted, to reduce these negative impacts associated with the project. These measures are summarized below:

- o Adherence to County-approved erosion control plans during construction to reduce potential erosion and sedimentation impacts.
- o Utilization of properly muffled construction equipment and vehicles, and limiting construction activities to daylight hours to mitigate noise impacts on surrounding areas;
- o Requirement on contractors to comply with Paragraph 11-60-5, Fugitive Dust, Chapter 60, Air Pollution Control, Title 11, Administrative Rules, State of Hawaii to minimize impacts on ambient air quality;
- o Utilization of properly maintained construction vehicles to lessen the adverse impacts on air quality due to vehicle emissions;
- o Scheduling of slow moving construction vehicles to the site during periods of low traffic volume to reduce disruption to peak period traffic flows;
- o Utilization of flagmen or traffic monitors to expedite traffic around construction area; and
- o Utilization of appropriate site design to minimize visual impacts and utilization of landscape berms and plantings to provide effective visual screens.

XI. DETERMINATION

This environmental assessment presently shows the proposed action will have no significant adverse impact on the environment, and consequently, an Environmental Impact Statement is not warranted. Therefore, in accordance with the provisions of Chapter 343, Hawaii Revised Statutes, a Negative Declaration is determined to be in order.

XII. FINDINGS AND REASONS SUPPORTING DETERMINATION

The following findings and reasons support the determination that there would be no significant adverse effect on the environment as a result of the proposed action:

1. The proposed action is a small public utility project that will not generate any direct adverse social or economic impacts.
2. The anticipated impacts associated with construction activities are short-term and temporary. They will be minimized by mitigation measures in accordance with applicable County of Kauai, State of Hawaii and Federal rules and regulations.
3. There will be no long-term adverse impacts on water quality of existing natural water resources, such as streams, ponds, aquifers and ground water.
4. No rare, endangered or threatened wildlife or flora species will be affected.
5. No archaeological, cultural or historic resources are known to exist in the project area. Should any such resources be uncovered during construction, appropriate measures for evaluating and determining courses of action as approved by the State or County will be undertaken.
6. Appropriate design and mitigation measures will be undertaken to reduce the visual impact of the proposed project on the environment.
7. The proposed action supports the policies of the *Kauai Water Use and Development Plan, Island of Kauai, Hawaii, February 1990*.
8. The primary benefit of this proposed action is to increase the storage and transmission capacity of the water system and improve fire protection in the Nawiliwili Harbor area.

XIII. COMMENTS FROM AND RESPONSES TO AGENCIES, ORGANIZATIONS AND INDIVIDUALS

A Draft Environmental Assessment for this project was transmitted to the following agencies, organizations and individuals for review and comment.

The parties that responded are indicated below and a copy of their correspondence with a response from the project consultant is attached to this section. Comments from these agencies, organizations and individuals have been incorporated into this Final Environmental Assessment, where necessary.

<u>State Agencies</u>	<u>Agencies Responded</u>	<u>Agencies Responding w/No Comment</u>	<u>Agency Letters and Responses Attached in this Section</u>
Department of Accounting and General Services		X	
Environmental Health Services, Department of Health	X		X
State Historic Preservation Division, Department of Land and Natural Resources	X		X
Land Management Division, DLNR	X		X
Harbors Division, Department of Transportation			
Highways Division, DOT	X		X
Department of Business, Economic Development & Tourism	X		
Office of Environmental Quality Control	X		X
<u>County Agencies</u>			
Mayor's Office			
Department of Planning	X		X
Department of Public Works	X		X
Fire Department	X		X

Chief of Police	X	
County Housing Agency		
Civil Defense Agency		
<u>Utility Companies</u>		
Kauai Electric		
GTE Hawaiian Tel	X	X
BHP Hawaii, Inc.		
<u>State Legislature</u>		
Senator Lehua Fernandes Salling		
Representative Ezra R. Konoho		
<u>Community Groups</u>		
Mr. Phil Hilacion		
Grove Farm Properties, Inc.		
Puakea Golf Course		



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

RECEIVED

NOV DEC 10 A 11:56

LAWRENCE J. JARRE
DIRECTOR OF HEALTH

IN REPLY, PLEASE REFER TO

December 5, 1996

96-199/epo

Mr. Glen T. Koyama
Belt Collins Hawaii Ltd.
680 Ala Moana Boulevard
Honolulu, Hawaii 96813-5406

Dear Mr. Koyama:

Subject: Draft Environmental Assessment
Proposed Reservoir and Transmission Line
Nawiliwili, Kauai
THK: 3-3-03: 01

Thank you for allowing us to review and comment on the proposed project. We have the following comments to offer at this time:

1. The material resulting from landclearing and grubbing activities shall be disposed of in accordance with the provisions of Hawaii Administrative Rules (HAR), Title 11, Chapter 58.1, "Solid Waste Management Control." Open burning of the material is prohibited.
2. The proposed construction activity may be a source of excessive noise which may impact nearby residents in the area. The applicant shall ensure that the provisions pertaining to construction activities found in HAR, Title 11, Chapter 46, "Community Noise Control," are complied with.
3. On page 12, it is stated that the discharge from hydrotesting the water transmission line "would be collected and hauled away by truck or by some other proper disposal method as determined by the contractor." The phrase "by some other proper disposal method" should be clarified.
4. The draft EA states that an NPDES permit is not expected to be required for this project. The applicant shall ensure that the hydrotesting water is not discharged into state waters and that the applicable provisions of HAR, Title 11, Chapter 55, "Water Pollution Control," are complied with.

Mr. Glen T. Koyama
December 5, 1996
Page 2
96-199/epo

5. The third proposed mitigation measure on page 20 regarding fugitive dust should be amended to read, "Require contractors to comply with Hawaii Administrative Rules, Section 11-60.1-33, Fugitive Dust, Chapter 11-60.1, "Air Pollution Control", to minimize impacts on ambient air quality;"

Should you have any questions on this matter, please contact Mr. Clyde Takekuma, Kauai District Health Office, at 241-3323.

Sincerely,

BRUCE S. ANDERSON, Ph.D.
Deputy Director of Environmental Health
c: Kauai District Health Office



BELT COLLINS
H A W A I I

February 11, 1997
97P-042/441.0800

Bruce S. Anderson, Ph.D.
Deputy Director of Environmental Health
Department of Health
State of Hawaii
P.O. Box 3378
Honolulu, Hawaii 96801

Dear Dr. Anderson:

Draft Environmental Assessment
1.0 MG Reservoir and Transmission Line
Department of Water, County of Kauai
Liberty, Nawiliwili, Kauai, Hawaii

Thank you for your letter of December 5, 1996 regarding the Draft Environmental Assessment for the proposed 1.0 MG reservoir and transmission line in Nawiliwili, Kauai. The Department of Water will comply with the following rules:

- 1) Hawaii Administrative Rules (HAR), Title 11, Chapter 58.1, "Solid Waste Management Control;" (No open burning of materials will occur.)
- 2) HAR, Title 11, Chapter 46, "Community Noise Control;"
- 3) HAR, Title 11, Chapter 55, "Water Pollution Control;" and
- 4) HAR, Title 11, Chapter 60, Sec. 1-33, "Fugitive Dust."

In reference to comment no. 3, the phrase "by some other proper disposal method" refers to the possibility of disposing the discharge from hydrotesting by a drywell or sedimentation basin. The applicant will specify in the construction contract with the contractor that no discharge from hydrotesting shall enter State waters. If an Underground Injection Control permit for the drywell or basin is required, a permit application will be submitted to the DOH for approval.

We trust our response adequately addresses your concerns regarding the proposed project.

Sincerely yours,

BELT COLLINS HAWAII LTD.

Clara T. Koyama
Clara T. Koyama

cc Department of Water, County of Kauai

640 ALA MOANA BOULEVARD, FIRST FLOOR, HONOLULU, HAWAII 96811-1004 U.S.A. TEL: 808 521-5181 FAX: 808 518-7019
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EDWARD CALENSO
GOVERNOR OF HAWAII



MICHAEL D. WILSON, CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
SECRETARY
Gilbert Coloma-Agaran

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
STATE HISTORIC PRESERVATION DIVISION
33 SOUTH KING STREET, 6TH FLOOR
HONOLULU, HAWAII 96813

November 22, 1996

Mr. Glen Koyama
Belt Collins Hawaii, Ltd.
680 Ala Moana Boulevard, First Floor
Honolulu, Hawaii 96813-5406

Dear Koyama:

SUBJECT: Draft EA for Proposed Reservoir and Transmission Line
Nawiliwili, Kauai
TMK: 3-3-03: 1

Thank you for the opportunity to review the draft EA for your project. We do not believe that there are any significant historic sites still present in this area, since the area has already been graded for the surrounding developments. Therefore, we believe that this project will have "no effect" on significant historic sites. We agree with your determination in the historic sites sections of the DEA.

If you have any questions, please call Nancy McMahon 742-7033.

Aloha,

DON HIBBARD, Administrator
State Historic Preservation Division

NM:amk



BELT COLLINS
HAWAII

February 11, 1997
97P-041/441-0800

Mr. Don Hibbard, Administrator
State Historic Preservation Division
Department of Land and Natural Resources
State of Hawaii
33 South King Street, 6th Floor
Honolulu, Hawaii 96813

Dear Mr. Hibbard:

Draft Environmental Assessment
1.0 MG Reservoir and Transmission Line
Department of Water, County of Kauai
Lihue, Nawiliwili, Kauai, Hawaii

Thank you for your letter of November 22, 1996 regarding the Draft Environmental Assessment for the proposed 1.0 MG reservoir and transmission line in Nawiliwili, Kauai. We appreciate your review and comments on the proposed project.

Sincerely yours,

BELT COLLINS HAWAII LTD.

Glen T. Koyama

cc: Department of Water, County of Kauai

640 ALA MOANA BOULEVARD, FIRST FLOOR, HONOLULU, HAWAII 96813-5406 U.S.A. TEL: 408 521-5101 FAX: 808 519-7619
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STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
P.O. BOX 611
HONOLULU, HAWAII 96809

December 5, 1996

LD-NAV
Ref.: DEAL0HGHR.RCO

Gen T. Koyama
Eart Collins Hawaii Ltd.
550 Ala Moana Blvd, 1st Floor
Honolulu, Hawaii 96813-5406

Dear Mr. Koyama:

SUBJECT: Review: Draft Environmental Assessment
Applicant: Department of Water, County of Kauai
Participant: State Department of Transportation
Project: 10MG Reservoir and Transmission Line
Location: Lihue, Nawiliwili, Kauai, Hawaii
Tax Map Key: 4th/ 3-3-02: 1

Transmitted herewith is a copy of our Commission on Water Resources Management's comments on the 10MG Reservoir and Transmission Line project.

The Department of Land and Natural Resources has no other comments to offer on the subject matter at this time.

Should you have any questions, please feel free to contact Nick Vaccaro of the Land Division Support Branch at 1-808-587-0438.

HAWAII: Earth's best!

Aloha,

Michael D. Wilson
MICHAEL D. WILSON

c: Kauai Land Board Member
Colbert M. Matsumoto, Esq.
Kauai District Land Office

State of Hawaii
DEPARTMENT OF LAND AND NATURAL RESOURCES
Commission on Water Resource Management
Honolulu, Hawaii

November 27, 1996

TO: Mr. Dean Uchida, Administrator
Land Division
FROM: Rae M. Lenz, Deputy Director
Commission on Water Resource Management (CWRM)
SUBJECT: DEAF 10 MG Reservoir and Transmission Line, Kauai DWS, Lihue Nawiliwili, Kauai
FILE NO.: DEAL0HGHR.COM

RECEIVED
DIVISION OF
LAND MANAGEMENT
DEC 23 2 28 PM '96

Thank you for the opportunity to review the subject document. Our comments related to water resources are marked below. In general, the CWRM strongly promotes the efficient use of our water resources through conservation measures and use of alternative non-potable water resources whenever available, feasible, and there are no harmful effects to the ecosystem. Also, the CWRM encourages the protection of water recharge areas which are important for the maintenance of streams and the replenishment of aquifers.

[x] We recommend coordination with the county government to incorporate this project into the county's Water Use and Development Plan.

[] We are concerned about the potential for ground or surface water degradation/contamination and recommend that approval for this project be conditioned upon a review by the State Department of Health and the developer's acceptance of any resulting requirements related to water quality.

[] A Wet Construction Permit and a Pump Installation Permit from the CWRM would be required before ground water is developed as a source of supply for the project.

[] The proposed water supply source for the project is located in a designated water management area, and a Water Use Permit from the CWRM would be required prior to use of this source.

[] Groundwater withdrawals from this project may affect streamflows. This may require an Instream flow standard amendment.

[] We recommend that no development take place affecting highly erodible slopes which drain into streams within or adjacent to the project.

[] If the proposed project diverts additional water from streams or if new or modified stream diversions are planned, the project may need to obtain a stream diversion works permit and petition to amend the Instream flow standard for the affected stream(s).

[] Based on the information provided, it appears that a Stream Channel Alteration Permit pursuant to Section 13-169-30, HAR will be required before the project can be implemented.

[] Based on the information provided, it does not appear that a Stream Channel Alteration Permit pursuant to Section 13-169-30, HAR will be required before the project can be implemented.

[] An amendment to the Instream flow standard from the CWRM would be required before any streamwater is diverted.

[] Any new development that is permitted along a stream that is not yet channelized should be based on the express condition that no stream will be channelized to prevent flooding of the development. Development in the open floodplain should not be allowed, other economic uses of the floodplain should be encouraged.

[x] OTHER:

Although we have no substantial comments on the DEAF, we would like to take this opportunity to comment on the 1992 draft Kauai WUDP which has updated proposed uses which are slightly different than the 1990 Kauai WUDP which has been adopted by the CWRM. Although the plan is organized well, it is unclear how 20-yr proposed uses are calculated. Please refer to Table A-6 in the 1992 Draft WUDP for an example. Otherwise, this information should be incorporated as an update to the next WUDP.

If there are any questions, please contact Roy Hardy at 587-0274.

BENJAMIN J. CAYETANO
GOVERNOR



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
869 PUNCHBOWL STREET
HONOLULU, HAWAII 96813-5097

NOV 21 P 2:27

KAZU HAYASHIDA
DIRECTOR
DEPUTY DIRECTOR
SERIAL MATRIBODA
OLEIWA IL OROKIO

REPLY REFER TO:
HWY-PS
2.2615



BELT COLLINS
HAWAII

February 11, 1997
97P-044/441,0800

Mr. Kazu Hayashida, Director
Department of Transportation
State of Hawaii
869 Punchbowl Street
Honolulu, Hawaii 96813-5097

Dear Mr. Hayashida:

Mr. Glen T. Koyama
Belt Collins Hawaii, Ltd.
680 Ala Moana Boulevard, First Floor
Honolulu, Hawaii 96813-5406

Dear Mr. Koyama:

Subject: Environmental Assessment
Proposed Reservoir and Transmission Line
Nawiliwili, Kauai, Hawaii; TMK: 3-3-03: 1

Thank you for transmitting the subject document for our review and comment.

The applicant should closely coordinate the planning, design and installation of the water transmission line with our Kauai District, Highways Division.

All plans for construction work on Nawiliwili Road, a State highway facility, must be submitted for our review and approval.

Very truly yours,

Kazu Hayashida
KAZU HAYASHIDA
Director of Transportation

Draft Environmental Assessment
1.0 MG Reservoir and Transmission Line
Department of Water, County of Kauai
Lihue, Nawiliwili, Kauai, Hawaii

Thank you for your letter of November 20, 1996 regarding the Draft Environmental Assessment for the proposed 1.0 MG reservoir and transmission line in Nawiliwili, Kauai. We have been submitting plans for preliminary review to your Kauai District, Highways Division office and will continue to coordinate our final design with that office. Construction on the proposed project will not commence until final approval is secured from your department.

Sincerely yours,

BELT COLLINS HAWAII LTD.
Glen T. Koyama
Glen T. Koyama

cc: Department of Water, County of Kauai

680 ALA MOANA BOULEVARD, FIRST FLOOR, HONOLULU, HAWAII 96813-5406 U.S.A. TEL: 808 531-3181 FAX: 808 531-7819
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BENJAMIN J. CAVETANO
COMMISSIONER



STATE OF HAWAII
OFFICE OF ENVIRONMENTAL QUALITY CONTROL

235 SOUTH BERETANIA STREET
HONOLULU, HAWAII 96813
TELEPHONE (808) 586-4118
FACSIMILE (808) 586-4118

December 9, 1996

Mr. Earnest Lau
Department of Water
County of Kauai
4398 Pua Loke Street
Lihue, Hawaii 96766

Dear Mr. Lau:

Subject: Draft Environmental Assessment for the Nawiliwili Water
Reservoir and Transmission Line

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

1. We recommend constructing and painting the reservoir with
materials and colors that blend with the surroundings. We
also recommend landscaping with native Hawaiian plants to
reduce the visual impacts.

If you have any questions please, call Jeyan Thirugnanam at
5864185.

Sincerely,


Gary Gill
Director

c: Belt Collins

RECEIVED
GARY GILL
DIRECTOR

DEC 10 P 1:13

OFFICE OF ENVIRONMENTAL QUALITY CONTROL



BELT COLLINS
HAWAII

February 11, 1997
97P-038/441.0800

Mr. Gary Gill, Director
Office of Environmental Quality Control
State of Hawaii
235 South Beretania Street, Room 702
Honolulu, Hawaii 96813

Dear Mr. Gill:

Draft Environmental Assessment
1.0 MG Reservoir and Transmission Line
Department of Water, County of Kauai
Lihue, Nawiliwili, Kauai, Hawaii

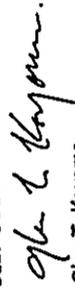
Thank you for your letter of December 9, 1996 regarding the Draft Environmental
Assessment for the proposed 1.0 MG reservoir and transmission line in Nawiliwili, Kauai.
The Department of Water has standard construction materials and colors for reservoirs but
will select a color scheme that is closest to the natural surroundings.

We will indicate in the Final Environmental Assessment that an indigenous
groundcover will be used on the slope behind the reservoir for erosion control, and
compatible low shrubs will be planted on the top of the slope for both erosion control and
visual screening. Flowering trees will be used on the golf course side of the site for
aesthetic accent and partial visual screening.

We trust our response adequately addresses your concerns regarding the proposed
project.

Sincerely yours,

BELT COLLINS HAWAII LTD.


Glen T. Koyama

cc: Department of Water, County of Kauai

600 ALA MOANA BOULEVARD, FIRST FLOOR, HONOLULU, HAWAII 96813-5404 U.S.A., TEL. 808 521-5141 FAX: 808 528-7819
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BELT COLLINS
H A W A I I

February 11, 1997
97P-040/441.0800

Mr. Dee M. Crowell, Director
Planning Department
County of Kauai
4444 Rice Street, Suite 473
Lihue, Kauai, Hawaii 96766

Dear Mr. Crowell:

Draft Environmental Assessment
1.0 MG Reservoir and Transmission Line
Department of Water, County of Kauai
Lihue, Niihau, Kauai, Hawaii

Thank you for your letter of November 26, 1996 regarding the Draft Environmental Assessment for the proposed 1.0 MG reservoir and transmission line in Nawiliwili, Kauai. The Department of Water is aware of the potential visual effect of the proposed project and has designed its reservoir to be partially below grade in order that the mauka properties look over the storage facility.

As consultant for the Department of Water, we conducted a visual analysis of the property. A diagram showing the proposed project and its effect on the adjacent property is provided in Figure 4 of the Environmental Assessment. From the analysis, we anticipate the proposed facility will have only minor effects on the adjacent properties.

We will add to the Environmental Assessment that a Class IV Zoning Permit will be required for the proposed project in addition to a Use Permit. Although the project is located in the Special Management Area, an SMA Permit will not be sought because the proposed project is a replacement public utility located within an existing right-of-way and therefore is exempt from the SMA Rules and Regulations of the County of Kauai. A written SMA clearance, however, will be sought from the County before construction commences.

We trust our response adequately addresses your concerns on the proposed project.

Sincerely yours,

BELT COLLINS HAWAII LTD.

Glen T. Koyama
Glen T. Koyama

cc: Department of Water, County of Kauai

650 ALA MOANA BOULEVARD, FIRST FLOOR, HONOLULU, HAWAII 96813-5006 U.S.A. TEL: 808 531-5104 FAX: 808 538-7819
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MARYANNE W. KUSAKA
MAYOR



STEVE OLIVER
COUNTY ENGINEER
TELEPHONE 241-6650

EDMOND P. K. RENAUD
DEPUTY COUNTY ENGINEER
TELEPHONE 241-6650

NOV 15 P 4:24

AN EQUAL OPPORTUNITY EMPLOYER

COUNTY OF KAUAI
DEPARTMENT OF PUBLIC WORKS
444 RICE STREET
MOKEHA BUILDING SUITE 213
LIHUE, KAUAI, HAWAII 96766

PW11-103

November 13, 1996

Belt Collins, Hawaii
680 Ala Moana Blvd.
Honolulu, Hawaii 96813

Attention: Mr. Glen Koyama

Gentlemen:

SUBJECT: ENVIRONMENTAL ASSESSMENT PROPOSED RESERVOIR
AND TRANSMISSION LINE NAWILIWILI, HI
TMK: 3-3-03:1

We have completed our review of the subject environmental assessment. We do not have any comments except for our previous construction plan review comments. We are enclosing a copy of our review comments dated September 30, 1996.

Should you have any questions, please feel free to contact Mr. Wallace Kudo of my staff at (808) 241-6620.

Very truly yours,

Kenneth Kitabayashi

KENNETH KITABAYASHI
Chief, Division of Engineering

WK/cu
attach.



BELT COLLINS
H A W A I I

February 11, 1997
97P-045/441.0800

Mr. Kenneth Kitabayashi, Chief
Division of Engineering
Department of Public Works
County of Kauai
4444 Rice Street, Suite 275
Lihue, Kauai, Hawaii 96766

Dear Mr. Kitabayashi:

Draft Environmental Assessment
1.0 MG Reservoir and Transmission Line
Department of Water, County of Kauai
Lihue, Nawiliwili, Kauai, Hawaii

Thank you for your letter of November 13, 1996 regarding the Draft Environmental Assessment for the proposed 1.0 MG reservoir and transmission line in Nawiliwili, Kauai. The Department of Water will continue to work with your agency to secure final plan approval.

Sincerely yours,

BELT COLLINS HAWAII LTD.

Glen T. Koyama
Glen T. Koyama

cc: Department of Water, County of Kauai

640 ALA MOANA BOULEVARD, FIRST FLOOR, HONOLULU, HAWAII 96813-5106 U.S.A., TEL: 808 531-3181 FAX: 808 536-7819
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HAWAII - SINGAPORE - HONG KONG - AUSTRALIA - THAILAND - GUAM



Fire Department Comments:

Proposed Reservoir (Tank) & Transmission Line
Nawiliwili, Kauai
TMK#: 3-3-03:1

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96 NOV 22 P 2:22
96 NOV 20 P 3:47
COUNTY OF KAUAI

The Fire Department is elated to learn that this project is soon to be reality. The fire protection resources in the Nawiliwili-Niumalu area have been sorely lacking and is long overdue. The advent of this project will benefit our Department in the providing of a greater degree of emergency care in the community during an incident of fire.

The project will yield immediate benefit when completed. But we hope that this will (only) be the inception of further improvements that will be done to the rest of the infrastructure in the community.

Captain Mike Kano
Fire Prevention Bureau
Fire Department
County of Kauai
4444 Rice Street, Suite 295
Lihue, Kauai, Hawaii 96766

Dear Captain Kano:

Draft Environmental Assessment
1.0 MG Reservoir and Transmission Line
Department of Water, County of Kauai
Lihue, Nawiliwili, Kauai, Hawaii

Thank you for your memorandum of November 12, 1996 regarding the Draft Environmental Assessment for the proposed 1.0 MG reservoir and transmission line in Nawiliwili, Kauai. Your support for this project is greatly appreciated.

Sincerely yours,

BELT COLLINS HAWAII LTD.

Glen T. Koyama
Glen T. Koyama

cc: Department of Water, County of Kauai

Mike Kano
Mike Kano, Captain
Fire Prevention Bureau
11/12/96

BELT COLLINS
HAWAII

February 11, 1997
97P-039/441-0800

P.O. Box 591
Lihue, Hawaii 96766
Telephone (808) 241-5053

GTE Hawaiian Tel

BELT COLLINS
HAWAII

December 4, 1996

8:08:43 AM '96

February 11, 1997
97P-043/441.0800

Belt Collins, Hawaii
680 Ala Moana Blvd.
Honolulu, HI 96813-5406

Mr. Gary Heu, Section Manager
GTE Hawaiian Tel
P.O. Box 591
Lihue, Kauai, Hawaii 96766

Attn: Mr. Glen T. Koyama

Subject: Proposed Lihue 1.0MG (Nawiliwili) Reservoir & Transmission Line

Dear Mr. Koyama,

Draft Environmental Assessment
1.0 MG Reservoir and Transmission Line
Department of Water, County of Kauai
Lihue, Nawiliwili, Kauai, Hawaii

We have reviewed the Draft Environmental Assessment for the above project and submit the following comments:

- 1) After preliminary plans for the project has been completed, please provide us with a set of the electrical plans for our review and comment.
- 2) To ensure that we have sufficient telephone lines for the telemetering alarms, we will need to know exactly how many circuits will be required.
- 3) There may be aid-to-construction charges to install the necessary telephone facilities for this project. A cost estimate will be submitted upon review of the electrical plans. Please provide name and address of who the estimate should be sent to.

Thank you for your letter of December 4, 1996 regarding the Draft Environmental Assessment for the proposed 1.0 MG reservoir and transmission line in Nawiliwili, Kauai. The information you requested will be submitted for review and comment.

The Department of Water looks forward to securing the necessary telephone services from your company.

If you have any questions, please call Vic Vilion at (808) 241-5053.

Very truly yours,


Gary Heu
Section Manager

Sincerely yours,

BELT COLLINS HAWAII LTD.


Glen T. Koyama

cc: Department of Water, County of Kauai

XIV. REFERENCES

Archaeological Inventory Survey Grove Farm Lihue/Puhi Project Area. 1993.
Prepared by Paul H. Rosendahl, Ph.D., Inc.

Archaeological Inventory Survey and Sub-Surface Testing in a 34-Acre Property, Niumalu, Puna, Kauai (TMK 3-2-03: 8). August 1994. Prepared by Cultural Surveys Hawaii.

Draft Lihue Development Plan. October, 1975. Prepared by the Joint Venture of EDAW inc. and Muroda & Associates, inc.

The Hawaii State Plan Revised. Chapter 226 Hawaii Revised Statutes as amended. Hawaii State Plan Policy Council, Department of Planning and Economic Development, State of Hawaii.

Kauai Water Use and Development Plan, Island of Kauai, Hawaii. February 1990.
Prepared by R.M. Towill Corporation.

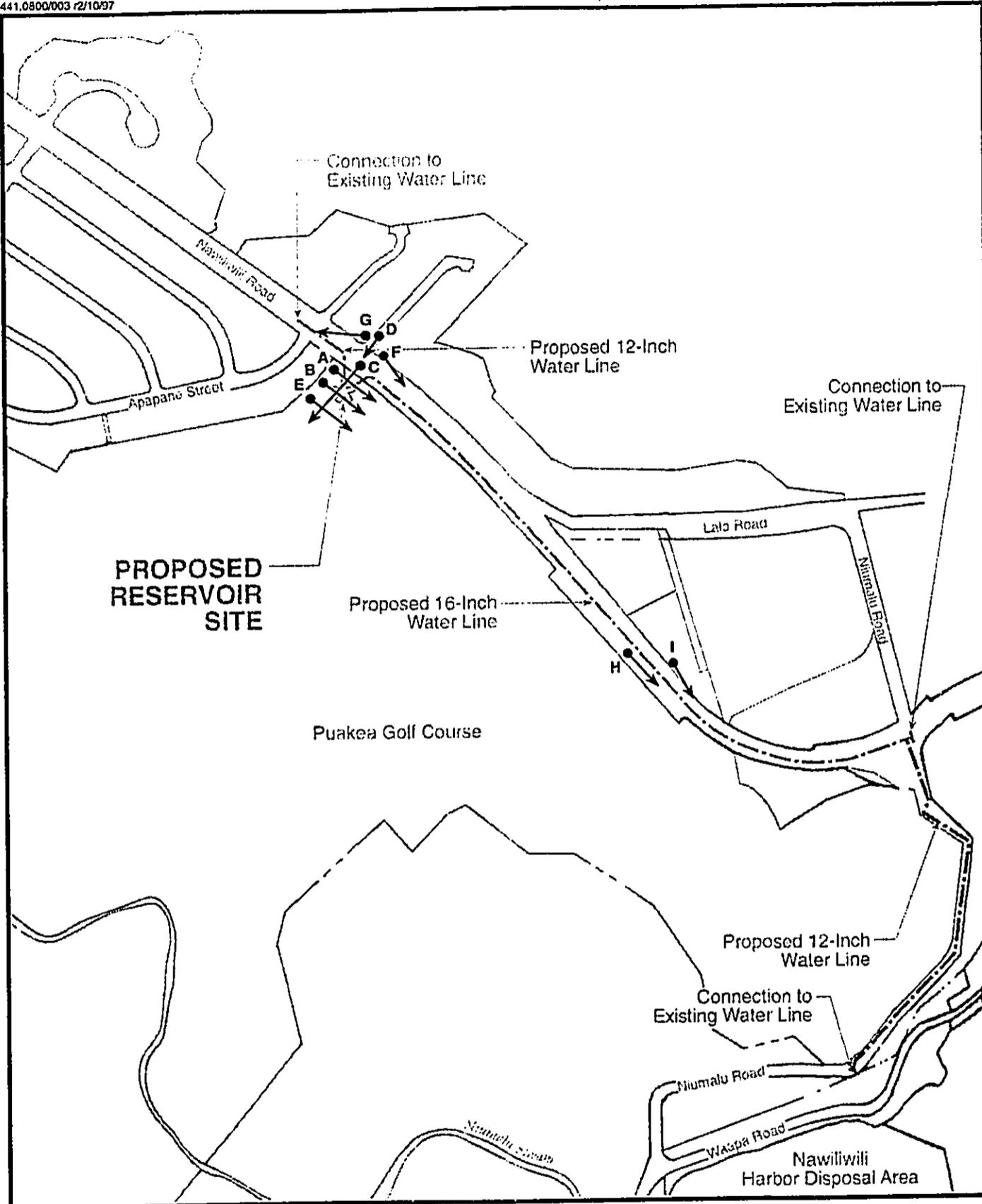
1982 Kauai General Plan Update. June 1982. Prepared by Planners Collaborative with Richard Moor, Wilson Okamoto & Associates, VTN Pacific, and William Liggett.

Letter from Bishop Museum to Mr. Susumu Ono, April 14, 1981, regarding *Proposed Niumalu Archaeological and Historical District, Island of Kauai.*

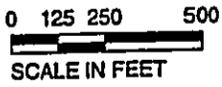
Soil Survey of the Islands of Kauai, Oahu, Maui, Molokai, and Lanai, State of Hawaii. 1972. USDA Soil Conservation Service.

APPENDIX

PHOTO SURVEY OF PROJECT SITE
1994



NORTH

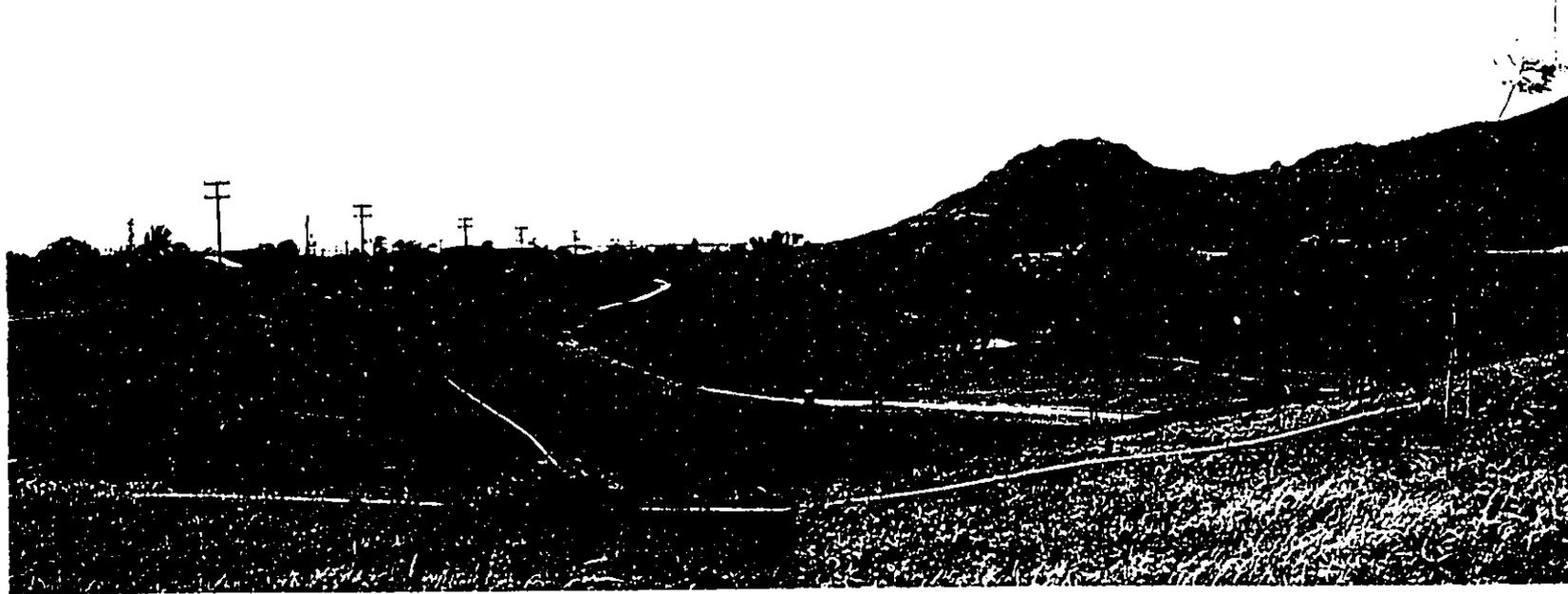


INDEX TO PHOTO SURVEY

LIHUE RESERVOIR
Water Department, County of Kauai
Prepared by: Belt Collins Hawaii, February 1997

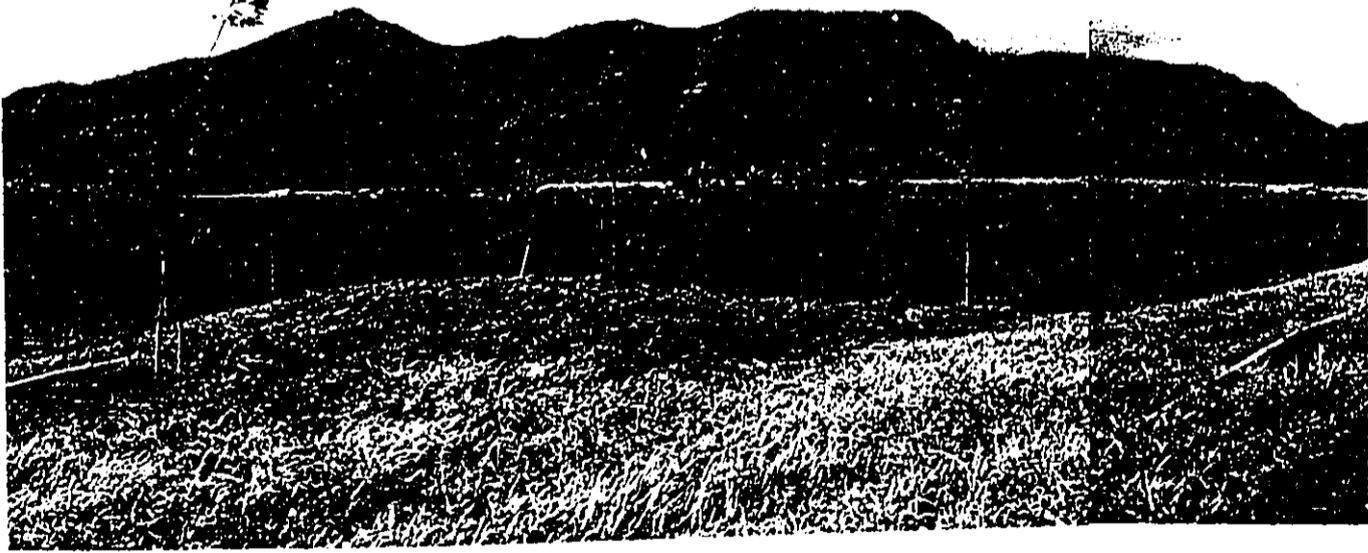
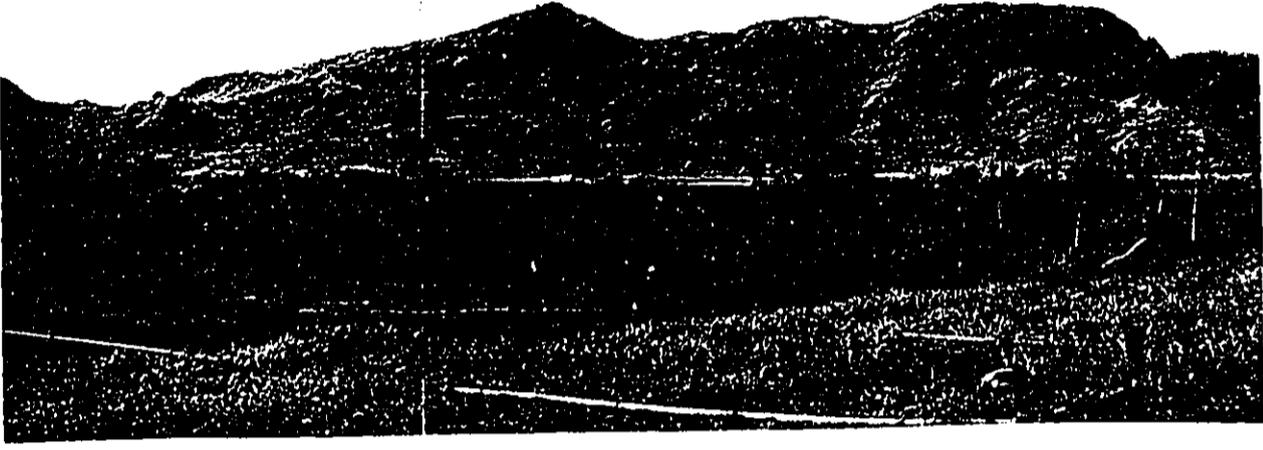


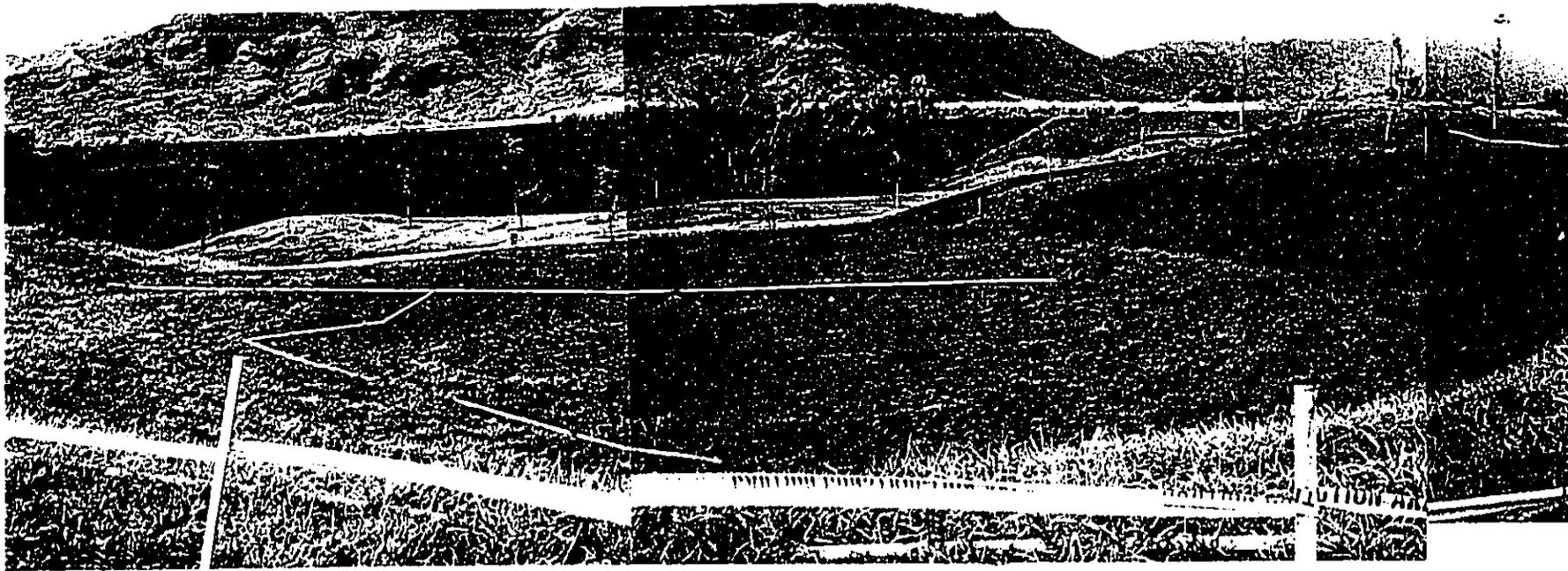
Ⓐ View looking south east



Ⓑ View looking south east

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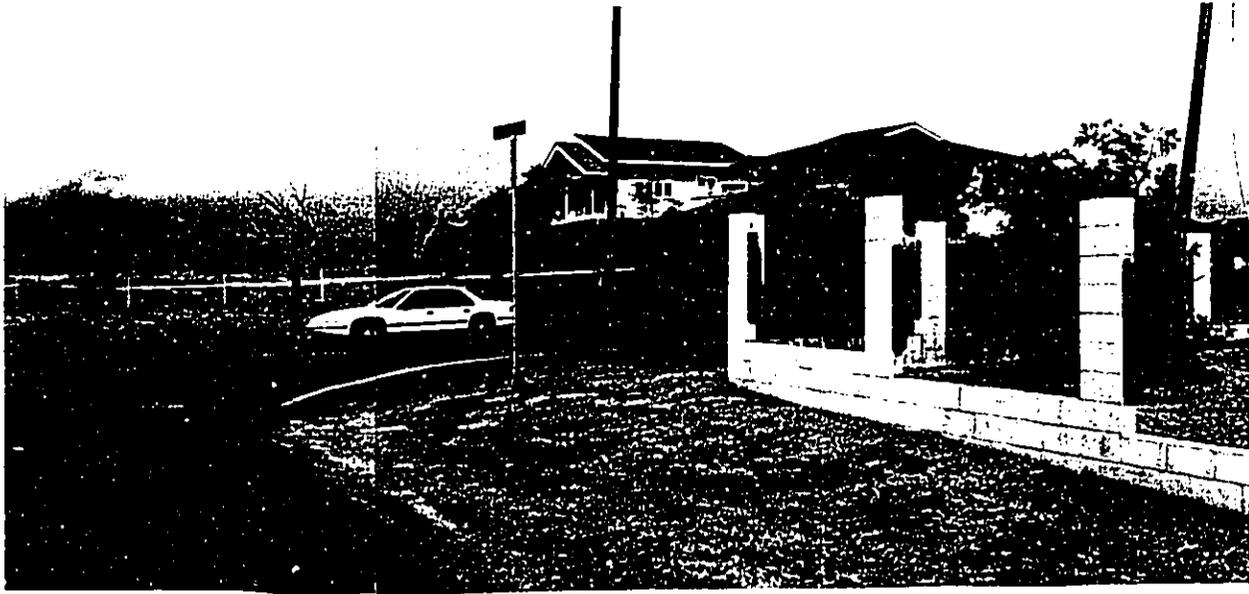


© View looking south west



© View looking south west from accross the street

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1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100



Ⓔ View looking along south border of project site

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Ⓔ View looking south on Nawiliwili Road



Ⓕ View looking north on Nawiliwili Road

