DEPARTMENT OF WATER SUPPLY • COUNTY OF HAWAII
25 AUPUNI STREET • HILO, HAWAII 96720
TELEPHONE (808) 961-8660 • FAX (808) 961-8657

November 3, 1999

Genevieve Salmonson, Director
Office of Environmental Quality Control
State Office Tower
235 South Beretania Street, Room 702
Honolulu, HI 96813

'99 NOV -8 P2:09

FINDING OF NO SIGNIFICANT IMPACT (FONSI) FOR
KAUMANA DRIVE PIPELINE REPLACEMENT - PHASE II
SOUTH HILO, HAWAII

The Department of Water Supply has reviewed the comments received during the 30-day public comment period which began on September 23, 1999. The agency has determined that this project will not have significant environmental effects and has issued a FONSI. Please publish this notice in the November 23, 1999 Environmental Notice.

We have enclosed a completed OEQC Publication Form and four copies of the final EA. Please call Mr. Kurt Inaba of my staff at 961-8665 if you have any questions.

Milton D. Pavao, P.E.
Manager

KYI:dms

Enc.

1999-11-23-HA-FEA-

FINAL ENVIRONMENTAL ASSESSMENT

KAUMANA DRIVE PIPELINE REPLACEMENT-PHASE II

DWS JOB NO. 91-533

Punahoa 1 and Ponahawai, District of South Hilo, Hawaii

Prepared for:

Department of Water Supply
County of Hawaii
25 Aupuni Street
Hilo, Hawaii 96720

Prepared by:

BK Inc.
and
Gerald Park Urban Planner

FINAL ENVIRONMENTAL ASSESSMENT

KAUMANA DRIVE PIPELINE REPLACEMENT-PHASE II

DWS JOB NO. 91-533

Punahoa 1 and Ponahawai, South Hilo District, Hawaii

Prepared in Partial Fulfillment of the Requirements
of Chapter 343, Hawaii Revised Statutes, Title 11,
Chapter 200, Hawaii Administrative Rules,
Department of Health, State of Hawaii

Prepared for:

Department of Water Supply
County of Hawaii
25 Aupuni Street
Hilo, Hawaii 96720

Prepared by:

BK Inc.
675 Kinoole Street
Hilo, Hawaii 96720

and

Gerald Park Urban Planner
1400 Rycroft Street, Suite 876
Honolulu, Hawaii 96814

October, 1999

SUMMARY INFORMATION

Project:	Kaumana Drive Pipeline Replacement-Phase II (Kaumana Reservoir to Ainako Avenue)
Applicant:	Department of Water Supply County of Hawaii 25 Aupuni Street Hilo, Hawaii 96720
Approving Agency:	Department of Water Supply *for Mayor, County of Hawaii*
Tax Map Key:	No Tax Map Key for Roadway
Land Area:	Not Determined
Land Owner:	County of Hawaii
Private Roads:	Various
Existing Use:	Road
State Land Use Designation:	Urban
General Plan:	Low Density Urban
Zoning:	RS-10, RS-15
Special Management Area:	Outside SMA
Need for Assessment:	Use of County Lands and Funds
Contact Person:	Kurt Inaba Department Water Supply County of Hawaii 25 Aupuni Street Hilo, Hawaii 96720 Telephone: (808) 961-8660

TABLE OF CONTENTS

LIST OF FIGURES AND PHOTOGRAPHS

DESCRIPTION OF THE PROPOSED PROJECT 1

The Department of Water Supply, County of Hawaii, proposes to construct improvements to a section of its South Hilo Water System. The proposed project is planned within the right-of-way of Kaumana Drive in the ahupua'a of Punahoa 1 and Ponahawai, District of South Hilo, County, Island, and State of Hawaii. There is no tax map key for Kaumana Drive. A Location Map is shown in Exhibit 1.

A. Purpose of the Project

The purpose of the project is to upgrade a section of the South Hilo Water System within Kaumana Drive. The existing 5-inch and 6-inch galvanized iron pipelines, which are about 43+ years old, are in deteriorated condition and prone to leaking despite frequent repairs made by the Department of Water Supply to maintain the pipeline. In addition, mineral buildup inside the pipes have reduced the inside diameter to much less than the original diameter thus reducing carrying capacity.

B. Technical Characteristics

The Department of Water Supply proposes to install approximately 5,900 LF of 8-inch ductile iron pipe along Kuamana Drive between Hokulani Street on the west and Ainako Avenue on the east. Most, if not all of the pipeline will be installed within the road shoulder on either side of Kaumana Drive. Although the 8-inch line is routed primarily along the south side of Kaumana Drive, it crosses over to the north side and back to the south side three times. In addition, service connections will be made to properties opposite the pipeline thus necessitating additional street crossings.

Approximately 1,200 LF of 6-inch high pressure ductile iron pipe will be installed parallel with the 8-inch line between Alahelenui Street and a private road identified on construction plans as Road "B". The purpose of the high pressure lines is to insure that each customer is serviced with a minimum of 40 psi static pressure.

The Department of Water Supply will also install 4-inch ductile iron pipe within three private roads (or shared driveways) off Kaumana Drive. The length of pipe for the unidentified private roads are approximately 300, 285, and 530 LF respectively.

New fire hydrants will be installed and existing fire hydrants removed from existing lines and reinstalled on the new pipeline. The fire hydrants are spaced per requirements of the Hawaii County Fire Department.

Existing water meters within the right-of-way and private roads will be relocated outside the properties being serviced. Service connections and installation of new water meters will be performed at no cost to the customer.

A cut and cover construction method is assumed with excavated material hauled by truck to a stockpile site. Excavation will precede laying of the pipeline and the contractor will coordinate the interaction between excavation, material delivery to the work site, and pipeline installation. The pipeline will be placed in a 2-foot wide trench at a minimum depth of 33 inches (pipe invert). Shut off valves will be placed about every 1,000 lineal feet which also allows the line to be tested under pressure. Prior to

testing, the pipeline and trench will be backfilled to road grade, and following testing, the trench and adjoining area will be restored to pre-construction condition or better.

The pipeline will be filled with water and tested under pressure. Following pressure testing, the pipe will be chlorinated and water discharged at locations to be determined by the Contractor. The volume of testing water is estimated at 8,100 gallons/1,000 feet of 8" pipe, 3,800 gallons for the 6" pipe, and 3,000 gallons for the 4" pipe.

C. Economic Characteristics

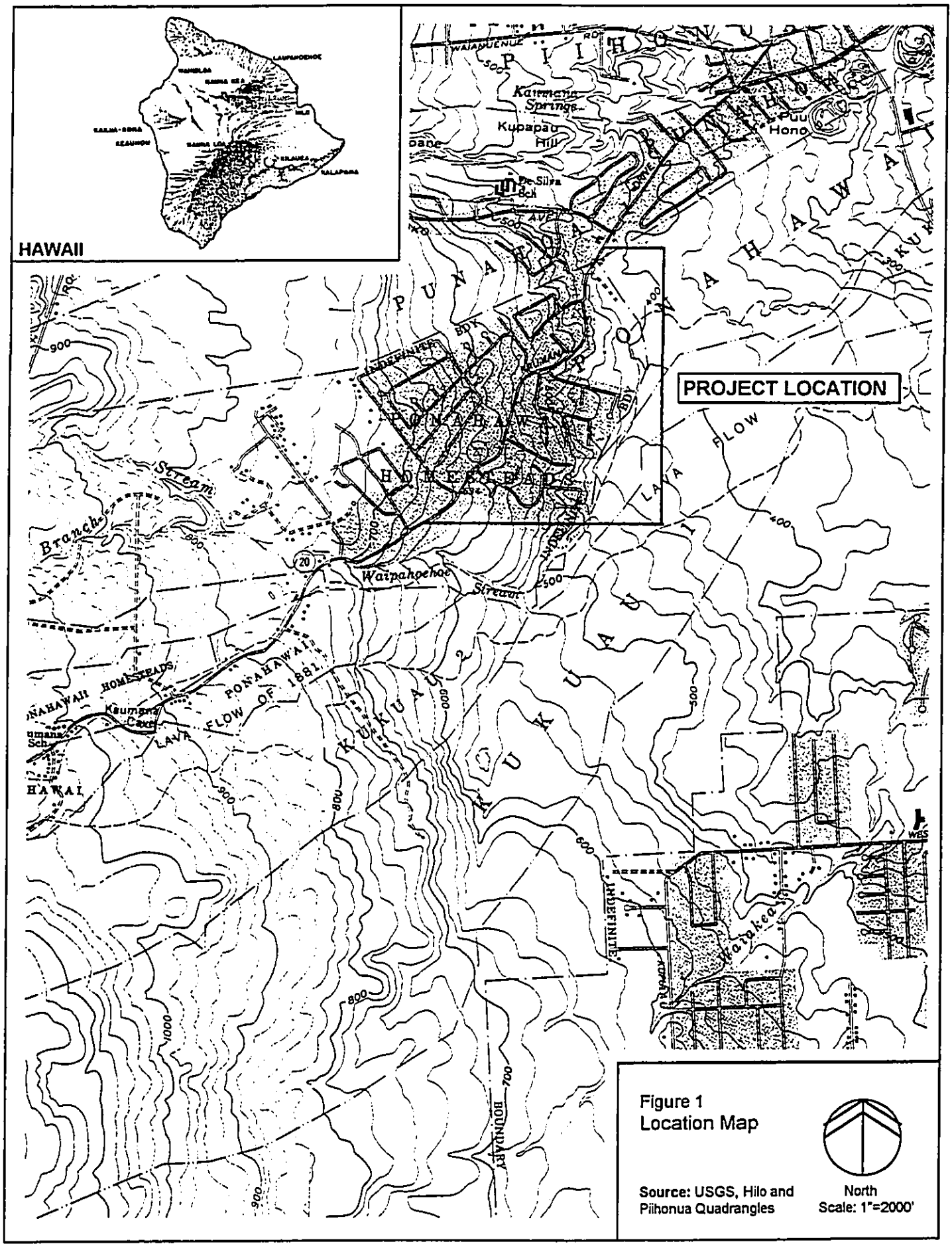
1. Cost and Phasing

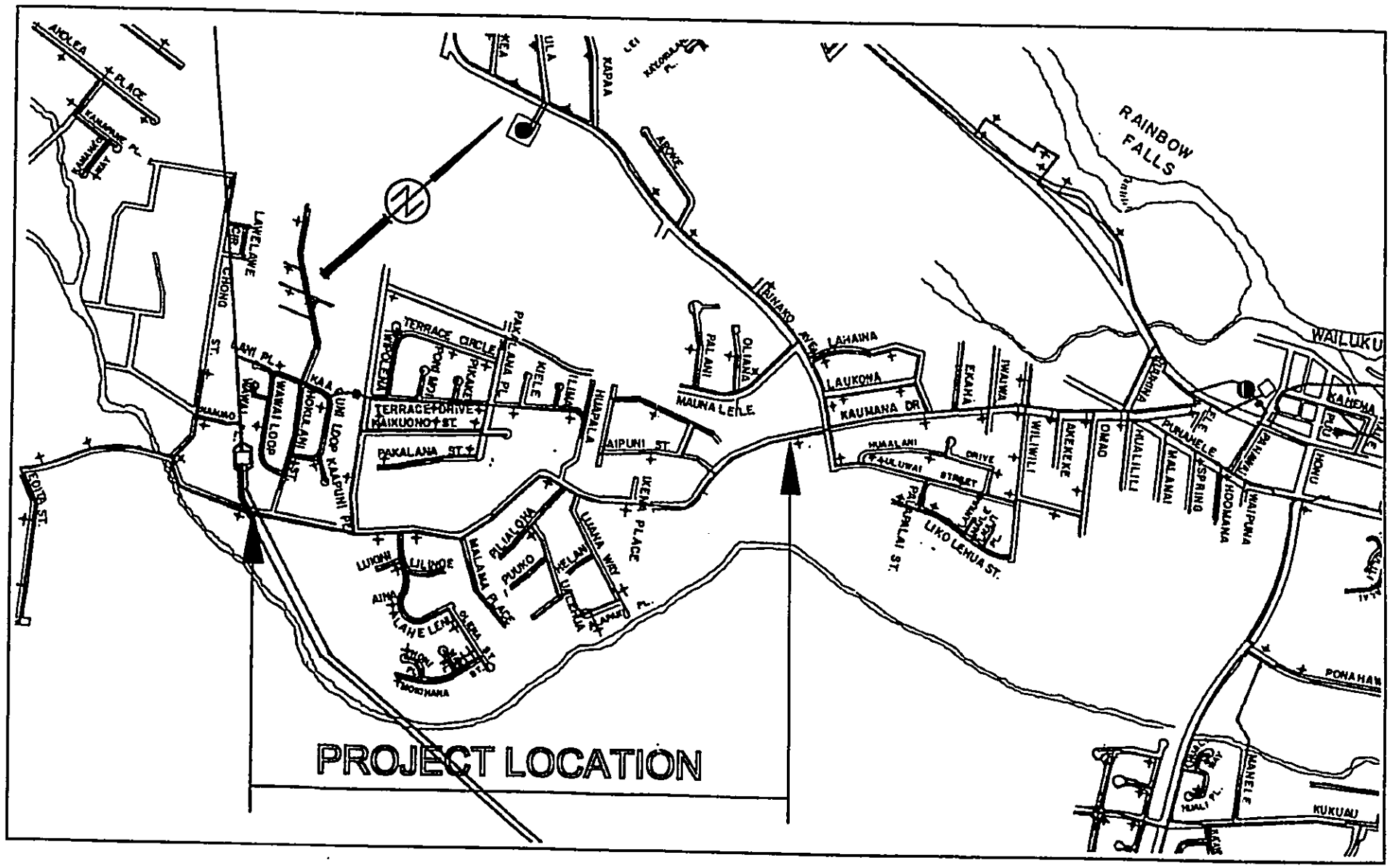
The cost of the project is estimated at $1.0 million and will be funded by the Department of Water Supply Capital Improvements Project Budget.

The project will be constructed in one phase. Construction work will commence in the last quarter of 1999 with an estimated completion in 12 months.

2. Land Ownership

Kaumana Drive is owned and maintained by the County of Hawaii. Three private roads or driveways are included in the project. The Department of Water Supply has easements within the private roadways in which the pipeline will be installed.


HAWAII
PROJECT LOCATION
Kaimana Springs
Kupapau Hill
Puu Hono
De Silva Ranch
Waipahoehoe Stream
Branch
PONAHAWAI HOMESTEADS
PONAHAWAI FLOW OF 1881
LAVA FLOW
KUKUAU 2
KUKUAU
Waiakea
BOUNDARY
Figure 1
Location Map
Source: USGS, Hilo and Piihonua Quadrangles
North
Scale: 1"=2000'



LOCATION PLAN

NOT TO SCALE

DESCRIPTION OF THE AFFECTED ENVIRONMENT 2

A. Existing Conditions

The section of the South Hilo Water System served by the Kaumana pipeline was built prior to 1956 (Note: There are no records of exact date of installation. DWS records for the system are dated 1956). The system has not been improved since that time although new pipelines have been installed and service provided off the new lines to other portions of the service area.

Currently, approximately 354 customers between Hokulani Street and Ainako Avenue are serviced by the pipeline. An undetermined number of customers on private roads are also served by the system. Customers have experienced low water pressure and low flow. The shortcomings are not water source related but due to gradual deterioration of the existing distribution system serving the area.

B. Climate

Rainfall in the Hilo area averages 150 to 200 inches per year. Monthly rainfall ranges between 20 to 40 inches with the most rainfall occurring between December and February. Temperature is relatively cool with monthly lows averaging 60^0 F during the winter to highs in the upper 80's (and low 90's) during the summer. Relative humidity typically ranges between 60 to 90 percent.

C. Topography

Ground elevation falls from 700 feet at Hokulani Street to approximately 380 feet near Ainako Drive a distance of about 1.1 mile. The ground surface is relatively flat because of the asphalt concrete pavement comprising the road surface.

D. Soils

The Soil Conservation Service (1973) maps one soil---Keaukaha extremely rocky muck (rKED)---along the alignment of Kaumana Drive. The surface layer is very dark brown muck about 8 inches thick. It is underlain by pahoehoe lava bedrock. The soil above the lava is rapidly permeable, runoff is medium, and the erosion hazard is slight.

E. Drainage

Nine culverts and box culverts cross Kaumana Drive at various locations along the pipeline alignment. Engineering drawings (profiles) show no underground drainage system in the road right-of-way. Local residents indicate that runoff flows down Kaumana Drive or across properties on the Puna side of the street where it eventually discharges into Alenaio Stream.

In the vicinity of Terrace Drive, runoff discharges into a gulch and makes its way to Alenaio Stream.

F. Natural Hazards

The Flood Insurance Rate Map panel for this area designates all areas along Kaumana Drive as Zone "X" which is defined as "areas determined to be outside the 500 year flood plain (FEMA, 1970)".

Lava Flow Hazard Maps (USGS, No Date) divides the Island of Hawaii into "zones that are ranked from 1 [highest] to 9 [lowest] based on the probability of coverage by lava flows". The District of South Hilo is placed in Zone 3 in which the probability of coverage by lava flows is high. Most of the South Hilo District is susceptible to lava hazards from Kilauea, Hawaii's youngest and, in modern times, most active volcano.

G. Surface Water

There are no streams within the limits of the project, however, several streams are located to the west and south of Ponahawai Homesteads. Kaluiiki Branch and Waipahoehoe Streams are tributaries to Alenaio Stream. The former streams cross under Kaumana Drive above Ponahawai Homesteads and flow south then northeast before entering Alenaio Stream which is located south of Kaumana Drive and Ponhawai Homesteads. Both Kaluiiki Branch and Waipahoehoe Streams are intermittent and varies in flow from broad streambed to defined channels

H. Historical Features

No archaeological or cultural features were observed within the Kaumana Drive right-of-way.

I. Flora and Fauna

Properties along Kaumana Drive within the project area are principally developed, single-family residential lots. Most of the yards are planted in grass and trees and palms such as octopus tree, African tulip, guava, coconut, areca palms, and raphis palms are common. Pointsettia, mock orange, snowbush, star jasmine, sansivera, dracaena, ipomea, eranthemum, azalea, impatiens, jade plant, ixora, ti, heliconia, ginger, monstera, croton, and various ferns are planted for accent alongside rock walls, telephone/electrical poles, and driveways.

A faunal survey was not conducted. Given the developed residential character of the neighborhood, dogs, cats, and rodents are probably the most common animals present. Chirping birds were heard but not seen.

J. Land Use Controls

State and County land use controls governing the use of the property adjacent to the pipeline are:

State Land Use Designation: Urban
County of Hawaii General Plan: Low Density Urban
Zoning: RS-10, RS-15
Special Management Area: Outside Special Management Area

K. Public Facilities

There are no municipal sewer or drainage systems in the project area.

Kaumana Drive is only connecting road in Hilo to the Saddle Road which crosses the island between Mauna Kea and Mauna Loa. The two-way, two-lane, all weather surface road lies within a 60-foot right-of-way. The posted speed limit ranges between 25 to 35 mph in the project area.

Power and communication systems are provided by overhead lines. The lines are supported by poles within the right-of-way of Kaumana Drive.

No public schools were observed in the project area. There is, however, a preschool operating at the Kaumana Drive Baptist Church at Ainako Avenue and Kaumana Drive. The principal buildings of the church are located about 200 feet beyond the project limits.

SUMMARY OF POTENTIAL ENVIRONMENTAL IMPACTS AND MEASURES TO MITIGATE ADVERSE EFFECTS 3

A. Assessment Process

The scope of the project was discussed with the consulting engineer and staff of the Department of Water Supply. State and County agencies were contacted for information relative to their areas of jurisdiction and expertise. Time was spent noting conditions along Kaumana Drive. The sum total of consultations and field investigations helped to identify existing conditions and features which could affect or be affected by the project.

- No change in the use of land is proposed;
- The pipeline will be confined to improved road rights-of-way;
- No rare, threatened, or endangered flora or fauna were observed;
- There are no recorded archaeological or cultural resources in the affected road rights-of-way; and
- The improvements are not located in a flood hazard area.

B. Short-term Impacts

Pipeline construction will be accomplished using cut and cover methods or variations thereof as determined by field conditions. In its simplest application, a trench will be dug to a specific depth, surface and subsurface materials removed, pipe sections laid and joined in the trench, and fill placed along or under the pipe to prevent movement off-line or off-grade. The trench would be back filled, compacted, the pipe would then be tested for leaks, and the ground surface restored to pre-construction conditions or better. Trenching work will be limited to 100-150 LF in advance of pipelaying. For the most part, construction will be confined to within the shoulder of Kaumana Drive except where work outside the shoulder cannot be avoided. Reasonable efforts will be taken to avoid damaging private property alongside the road.

Because the pipeline is route specific (versus site specific), construction progresses from one location to another along a staked or pre-determined alignment. Thus, construction impacts, although repetitive over the distance of the pipeline, are temporary at any one location.

Site work is a persistent source of fugitive dust. Site contractors are aware that dust is a nuisance to both workers and people living or working near to work sites and it is imperative for them to maintain stringent dust controls. Frequent water sprinkling is probably the most effective dust control measure given the size of the site and the type and scale of proposed improvements. The Contractor, however, may choose to implement other measures based on their experience with similar projects and job sites. Being located in an area of heavy rainfall, frequent showers also may help in controlling fugitive dust.

The Contractor will be responsible for general housekeeping of the site and for keeping adjacent training areas free of mud, sediment, and construction litter and debris. Pollution control measures will comply with Chapter 60.1, Air Pollution Control regulations of the State Department of Health.
Like fugitive dust, construction noise cannot be avoided. The pipeline is bounded by residential uses on two sides and many residences are located along the affected roadways. Residential properties are considered noise sensitive areas. Construction noise will be audible in these areas but exposure to

noise will vary by construction phase, the duration of each phase, and the type of equipment used during the different phases.

Maximum sound levels in the range of 82-96 db(A) measured at 50 feet from the source would be generated by heavy machinery and pneumatic impact equipment (or pavement cutting machines). Noise is most pronounced and therefore most annoying during the site work phase of any project. Reductions in sound levels, frequency, and duration can be expected during actual installation of the pipeline.

Construction noises may bother nearby residents but they already are exposed to noise throughout the day emanating from vehicle traffic.

Community Noise Control regulations establish maximum permissible sound levels for construction activities occurring within "acoustical" zoning districts. Based on residential uses in the area, the project is considered to be located in the Class A zoning district for noise control purposes. The maximum permissible daytime sound level in the district is 55 dBA between the hours of 7:00 AM to 10:00 PM and 45 dBA between 10:00 PM and 7:00 AM (Chapter 46, Community Noise Control, 1996).

In general, construction activities cannot exceed the permissible noise levels for more than ten percent of the time within any twenty minute period except by permit or variance. Any noise source that emits noise levels in excess of the maximum permissible sound levels cannot be operated without first obtaining a noise permit from the State Department of Health. Although the permit does not attenuate noise per se it regulates the hours during which excessive noise is allowed.

The general contractor will be responsible for obtaining the permit and complying with conditions attached to the permit. Work will be scheduled for normal working hours (8:00 AM to3:30 PM) Mondays through Fridays. The contractor will also ensure that construction equipment with motors are properly equipped with mufflers in good operating condition.

Site work will expose soil thus creating opportunities for runoff and erosion. Grading and stockpiling of soil will be performed in accordance with Chapter 10, Erosion and Sediment Control, Hawaii County Code and approved grading plans. Best Management Practices (BMPS) for erosion and drainage control during construction will be prepared for review and approval by the Department of Public Works.

Should archaeological or cultural features be unearthed, work in the immediate area will cease and historic authorities promptly notified for disposition of the finds.

Flora observed along the alignment are common to the Island and State of Hawaii. None are considered rare, threatened, or endangered or proposed for such status.

Construction in the right-of-way will interrupt through traffic, result in slightly longer travel times, and generally inconvenience motorists and pedestrians. These impacts cannot be avoided and are expected to be quite pronounced. At least one traffic lane will be closed and traffic diverted to the other lane during working hours. Local traffic may take alternative routes to avoid road work and the ensuing congestion. Traffic cones or other directional devices will be placed in the roadway to guide vehicles around work areas. Traffic tie-ups cannot be avoided and the contractor will implement measures to provide access past work sites and minimize the inconvenience to the general public. Traffic control

plans will be submitted to respective authorities for review and approval. Measures to be taken to mitigate traffic impacts include but are not limited to:

- Posting warning signs on both sides of the work area to alert motorists of road work and to slow traffic speed;
- Positioning traffic cones or other directional devices in the roadway to guide vehicles around work areas;
- Posting flagmen to assist in traffic control;
- Providing alternative access if driveway closings cannot be avoided;
- Limiting construction to between 8:00 AM and 3:30 PM, Monday through Friday.
- Providing two open lanes for traffic movement between the hours of 3:30 PM to 8:00 AM.

For safety purposes, trenches will be covered with traffic plates during non-working hours and safety devices and signs posted for the duration of construction. All road work will be coordinated with the Department of Public Works, County of Hawaii and shall conform with Chapter 22, Streets and Sidewalks, of the Hawaii County Code.

Material deliveries will be scheduled during non-peak traffic hours to minimize impacts on local traffic. Flagmen will be posted for traffic control during material loading and off-loading. Traffic delays can be expected and motorists will have to allow for more travel time if using Kaumana Drive.

The contractor will coordinate driveway crossings with homeowners. Vehicle access to individual lots (or lots where a common driveway is crossed) may be temporarily restricted during excavation and installation of the pipeline. Traffic plates will be placed over the pipeline trench until it is backfilled. A temporary cold mix patch will be applied immediately after backfilling and maintained until a permanent patch is authorized by the Department of Public Works. Excavated areas will be restored to pre-construction conditions or better. The Department of Public Works commented (1999) that "any signs and markings that have been damaged, removed, or adversely affected by the construction work shall be restored to its original condition or better".

Overhead utilities should not be affected by installation of the pipelines. Construction plans will be submitted for review and construction operations coordinated with the respective utility providers. Utility poles close to the trench will be temporarily braced.

In the event of accidental breakage, emergency crews will be summoned immediately to repair the breakage and affected residents and businesses notified of the disruption. If extensive repair work is required, the contractor will take reasonable effort to provide service to affected residents.

Temporary interruptions in service to residences are expected when existing water connections are disconnected and water meters replaced and relocated. Affected customers will be notified in advance of the disruption and the contractor will complete the necessary connections in a timely fashion to minimize inconvenience to water customers.

It is anticipated that chlorinated water to be discharged following disinfection will not adversely impact environmental resources along the pipeline alignment.

C. Long-term Impacts

The project will improve water delivery to users connected to the system. The Department of Water Supply is in the process of improving the county water system and projects similar to this action can be expected subject to funding and Capital Improvement Project priorities.
The buried pipelines will not result in long-term adverse impacts on air quality, the acoustical environment, historic features, and flora and fauna. The pipelines will not be seen thus no impacts on scenic resources or open space quality are anticipated.

The new pipeline should eliminate maintenance problems experienced with the existing pipeline and will improve water flow in terms of volume and pressure to customers serviced by the system. It is unlikely that the increase in water capacity will stimulate development in the immediate area. This part of Hilo is well developed for single-family residential uses and, we counted 5 vacant house sites within the project area. These lots may eventually be developed but it is not likely that the availability of water is the determining factor

ALTERNATIVES TO THE PROPOSED ACTION 4

A. No Action

The no action alternative would maintain the status quo and preclude the occurrence of environmental impacts, short and long-term, beneficial and adverse described in this Assessment. The Department of Water Supply does not consider the No Action alternative to be a prudent course of action.

PERMITS AND APPROVALS

Permits and approvals listed below are indicative of rather than a comprehensive listing of all permits that may be required to construct the project.

Permit	Authority
County of Hawaii	
Grubbing, Grading, Excavation and Stockpiling	Department of Public Works
Best Management Practices	Department of Public Works
Work within County Highway	Department of Public Works
State of Hawaii	
Variance from Pollution Controls	Department of Health
National Pollution Discharge Elimination System (NPDES) Permit	Department of Health

AGENCIES AND ORGANIZATIONS TO BE CONSULTED 6

Notice of the Draft Environmental Assessment for the Kaumana Drive Pipeline Replacement-Phase II was published in the Office of Environmental Quality Control Environmental Notice of September 23, 1999 and October 8, 1999. Copies of the Draft Environmental Assessment were distributed to the agencies listed below. Publication in the Environmental Notice initiated a 30-day public comment period which ended on October 25, 1999. As asterisk * identifies agencies and organizations that submitted written comments to the Draft Environmental Assessment. Comment letters and responses are found in Appendix A of the Final Environmental Assessment.

State of Hawaii
- *Department of Health

County of Hawaii
- *Department of Public Works
- *Planning Department (Telephone call on 9/23/99: No objections or comments)
- *Police Department
- Fire Department

Others
- Hawaii Electric Light Company
- GTE Hawaiian Tel
- Hilo Public Library (Draft EA Placed in Library)

Chapter 200 (Environmental Impact Statement Rules) of Title 11, Administrative Rules of the State Department of Health, establishes 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;

   There are no natural or cultural resources in the project area to be affected by the project.

2) Curtails the range of beneficial uses 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 project does not conflict with long-term environmental policies, goals, and guidelines of the State of Hawaii.

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

   The project will not substantially affect the economic or social welfare of the community or State.

5) Substantially affects public health;

   The proposed action will not adversely affect public health. On occasion, construction noise will exceed the allowable noise standard established by Hawaii Administrative Rules. Noise, however, will be temporary at any one location and should not endanger public health.

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

   The project will not result in substantial secondary impacts. The project is intended to better serve customers connected to the existing water system. As a single action, the project will not foster population changes or adverse impacts on public facilities.

7) Involves a substantial degradation of environmental quality;

   Environmental quality will not be degraded as a result of this project. Construction will be confined to improved land and road rights-of-way.

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

   At this time, the proposed project does not involve a commitment for a larger action. The Department of Water Supply, however, is planning similar type projects to upgrade the entire

South Hilo Water System. Planning and the timing of construction of future improvements will depend on availability of public funds and Department of Water Supply Capital Improvement Project priorities.

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

There are no rare, threatened or endangered flora or fauna or habitat in the project area.

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

Ambient air quality may be affected by fugitive dust and combustion emissions but can be controlled by measures stipulated in this Assessment. Construction noise will be pronounced during site work but should diminish as the structures are erected and the pipeline placed underground. All construction activities will comply with air quality and noise pollution regulations of the State Department of Health. Best Management Plans will be prepared to minimize construction runoff.

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

The proposed action is not located in a flood hazard area, tsunami zone, beach, erosion prone area, or adjacent to fresh and coastal water bodies.

The town of Hilo and surrounding areas are located in an area subject to lava inundation.

12) Substantially affects scenic vistas and viewplanes identified in county or state plans or studies; or

The proposed improvements will not substantially affect scenic vistas and view planes

13) Requires substantial energy consumption.

Long-term energy consumption has not been anticipated.

Based on the above criteria, the proposed Kaumana Drive Pipeline Replacement Project-Phase II will not result in significant adverse environmental impacts and an Environmental Impact Statement should not be required.

REFERENCES

Department of Water Supply. 1996. *Plans for the Construction of the Kaumana Drive Pipeline Replacement (Kaumana Res to Ainakoa Avenue).* Job No. 91-533. District of South Hilo.

Federal Emergency Management Agency. 1988 (amended). *Flood Insurance Rate Map, County of Hawaii.* Community Panel No. 155166 0880C.

Park, Gerald. 1999. *Field Observation.*

Planning Department, County of Hawaii. *County of Hawaii General Plan (As Amended).*

_____. *Zoning Map.*

U.S. Department of Agriculture, Soil Conservation Service. 1973. *Soil Survey of Hawaii.* In Cooperation with The University of Hawaii Agricultural Experiment Station. U.S. Government Printing Office, Washington D.C.

U.S. Department of the Interior, Geological Survey. No Date. *Volcanic and Seismic Hazards on the Island of Hawaii.* Written by Christina Heliker. U.S. Government Printing Office.

APPENDIX A

COMMENT LETTERS AND RESPONSES

Stephen K. Yamashiro
Mayor

Wayne G. Carvalho
Police Chief

James S. Correa
Deputy Police Chief

County of Hawaii
POLICE DEPARTMENT

349 Kapiolani Street • Hilo, Hawaii 96720-3998
(808) 935-3311 • Fax (808) 961-2702

RECEIVED
5-21-99

September 20, 1999

Mr. Gerald Park
Gerald Park Urban Planner
1400 Rycroft Street, Suite 876
Honolulu, HI 96814-3021

Dear Mr. Park:

SUBJECT : KAUMANA DRIVE PIPELINE REPLACEMENT-PHASE II
PUNAHOA 1 AND PONAHAWAI, SOUTH HILO DISTRICT, HAWAII

This acknowledges your letter of September 14, 1999, requesting our comments on the proposed project.

Staff has reviewed your request and has no comments or objections to offer at this time.

Thank you for the opportunity to comment.

Sincerely,

WAYNE G. CARVALHO
POLICE CHIEF

THOMAS J. HICKCOX
ASSISTANT POLICE CHIEF
FIELD OPERATIONS BUREAU

FHR:lk

BENJAMIN J. CAYETANO
GOVERNOR OF HAWAII

BRUCE S. ANDERSON, Ph.D., M.P.H.
DIRECTOR OF HEALTH

STATE OF HAWAII
DEPARTMENT OF HEALTH

P.O. BOX 3378
HONOLULU, HAWAII 96801

In reply, please refer to
File

September 24, 1999

99-199/epo

RECEIVED
9-30-99

Mr. Gerald Park
Gerald Park Urban Planner
1400 Rycroft Street, Suite 876
Honolulu, Hawaii 96814-3021

Dear Mr. Park:

Subject: Draft Environmental Assessment
Kaumana Drive Pipeline Replacement - Phase II
(DWS Job No. 91-533)
Punahoa 1 and Ponahawai
South Hilo District, Hawaii

Thank you for allowing us to review and comment on the subject project. We do not have any comments to offer at this time.

Sincerely,

GARY GILL
Deputy Director for
Environmental Health

Stephen K. Yamashiro
Mayor

Jiro A. Sumada
Deputy Chief Engineer

County of Hawaii
DEPARTMENT OF PUBLIC WORKS
25 Aupuni Street, Room 202 • Hilo, Hawaii 96720-4252
(808) 961-8321 • Fax (808) 961-8630

RECEIVED
10-13-99

October 11, 1999

Mr. Gerald Park
Urban Planner
1400 Rycroft Street, Suite 876
Honolulu, Hawaii 96814-3021

SUBJECT: ENVIRONMENTAL ASSESSMENT
Kaumana Drive Pipeline Replacement - Phase II
Punahoa I and Ponahawai, South Hilo, Hawaii

We have reviewed the subject EA transmitted with cover letter dated September 14, 1999 and provide the following comments.

1. All earthwork and grading shall be in conformance with Chapter 10, Erosion and Sediment Control, of the Hawaii County Code.

2. All work within the County right-of-way shall be in conformance with Chapter 22, Streets and Sidewalks, of the Hawaii County Code.

3. Any signs and markings that have been damaged, removed, or adversely affected by the construction work shall be restored to its original condition or better.

4. All traffic control devices within the County right-of-way shall be in conformance with the current edition of the "Manual on Uniform Traffic Control Devices for Streets and Highways."

5. This department has reviewed and commented on the preliminary construction plan.

Should there be any questions concerning this matter, please contact Mr. Kelly Gomes of our Engineering Division at (808) 961-8327.

for GALEN M. KUBA, Division Chief
Engineering Division

KG

c: Planning Department