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

FINAL ENVIRONMENTAL ASSESSMENT (FEA)  
FINDING OF NO SIGNIFICANT IMPACT (FONSI)  
KUAKINI HIGHWAY 16-INCH WATERLINE IMPROVEMENTS  
TAX MAP KEY 3RD DIVISION 7-5-008:009, 018, 019, AND 020  
NORTH KONA DISTRICT, ISLAND OF HAWAI‘I

The County of Hawai‘i, Department of Water Supply (DWS), has reviewed and responded to comments received during the 30-day public comment period which began on July 8, 2004. The DWS has determined that this project will not have significant environmental effects and has issued a FONSI. Please publish this notice in the November 8, 2004, OEQC Environmental Notice.

We have enclosed a completed OEQC Bulletin Publication Form and four copies of the Final Environmental Assessment for your use.

If there are any questions, please contact Mr. William Atkins of our Water Resources and Planning Branch at (808) 961-8070, extension 254.

Sincerely yours,

Milton D. Pavao, P.E.  
Manager

WA:dms  
Encs.

...Water brings progress...
FINAL ENVIRONMENTAL ASSESSMENT

Finding of No Significant Impact (FONSI)

KUAKINI HIGHWAY
16-INCH WATERLINE IMPROVEMENTS
DWS JOB No. 2003-821

District of North Kona
Island of Hawaii
State of Hawaii

October 2004

Prepared For:
DEPARTMENT OF WATER SUPPLY
County of Hawaii
345 Kekuanaoa Street, Suite 20
Hilo, Hawaii 96720

Prepared By:
Inaba Engineering, Inc.
273 Waianuenue Avenue • Hilo, Hawaii 96720
Ph. 808.961.3727 • Fx. 808.935.8033
FINAL ENVIRONMENTAL ASSESSMENT
Finding of No Significant Impact (FONSI)

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<table>
<thead>
<tr>
<th><strong>Project:</strong></th>
<th>KUAKINI HIGHWAY 16-INCH WATERLINE IMPROVEMENTS</th>
</tr>
</thead>
</table>
| **Applicant:** | Department of Water Supply  
County of Hawaii  
345 Kekuanaoa St., Suite 20  
Hilo, Hawaii 96720 |
| **Land Owner:** | Water Board of the County of Hawaii  
County of Hawaii  
345 Kekuanaoa St., Suite 20  
Hilo, Hawaii 96720 |
| **Proposing Agency:** | Department of Water Supply  
County of Hawaii |
| **Project Location:** | North Kona District  
County of Hawaii, Island of Hawaii |
| **Tax Map Key:** | 3rd Div. 7-5-8, 9, 18, 19, 20 |
| **Land Area:** | Water Line Alignment Approximately 9,000 L.F.  
Within Kuakini Highway Road Right-of-Way |
| **Existing Use:** | Roadway, Utility Corridor |
| **State Land Use Designation:** | Urban & Agricultural |
| **County General Plan:** | Varies Along Route. |
| **Existing Zoning:** | Varies Along Route. |
| **SMA:** | No SMA permit required. |
| **Contact Person:** | Mr. William Atkins  
Department of Water Supply  
County of Hawaii  
345 Kekuanaoa St., Suite 20  
Hilo, Hawaii 96720  
Phone: 808.961.8070 Ext. 254  
Fax: 808.961.8080 |
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Figure 3. Typical Pipeline Location in Roadway Section
Figure 4. Flood Rate Insurance Map (FIRM)
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             Draft EA Comment Letters
APPENDIX B  Photographs of Site
APPENDIX C  Additional Public Notification
             Public Informational Meeting Materials
PART 1

DESCRIPTION OF PROPOSED ACTION

A. Project Location

The proposed activity is located in Kailua-Kona, within the Kuakini Highway right-of-way which traverses the lands of Honuha, Hienaloli, Auhaukele, Puaa, Waisha, Kakuhihi, and Puapuaa, North Kona District, Island of Hawaii (See Figure 1, 2). The new 16-inch waterline will start at the Kuakini Hwy/Hualalai Road intersection and proceed south along Kuakini Highway to the Puapuaa 2.0 MG reservoir effluent pipeline ending just past Nakukui Drive.

B. Project Description, Purpose and Objectives of Project

The County of Hawaii Department of Water Supply (DWS) plans to install a new 16-inch diameter distribution waterline for current and future customers along Kuakini Highway and the Kailua area. Currently within Kuakini Highway right-of-way there is a 20" transmission line on the mauka side and an 8" distribution line on the makai side. The new 16" line is proposed to run along side the existing 8" line and will interconnect at several locations along the alignment to support the existing 8" line. The 20" transmission line supplies the Palani 0.30 MG 325 tank on Palani Road. The recently completed 2.0 MG Puapuaa reservoir will feed the new 16" distribution line. The Puapuaa tank and the Palani tank services the Kailua area.

With the new 16" line, the larger Puapuaa tank will be able to service higher demands and balance flows from the two tanks, thus relieving stress on the smaller Palani tank.

At its northern terminus, the new 16" waterline will tie in to an existing 12" line at the intersection of Hualalai Road and Kuakini Highway. The existing 12" line services Alii Drive to the north and south. The 16" line will proceed south along Kuakini Highway and tie in to the Puapuaa effluent line just south of Nakukui Drive, a distance of approximately 10,000 lineal feet. Within this alignment, a private developer for the Kona Hawaiian Village Time Share Project will be installing approximately 1,000 lineal feet of 16" waterline which will be constructed before this project. The net length of 16" pipeline installed related to this project therefore will
Draft Environmental Assessment:
Kuakini Highway 16-Inch Waterline Improvements

Figure 1: Island Location Map
Figure 2 - USGS Vicinity Map
TYPICAL PROPOSED NEW WATERLINE LOCATION
EXISTING KUAKINI HIGHWAY HALF SECTION

SCALE: 1/4" = 1'-0"

REFERENCE: 8" WATERLINE ALONG KUAKINI HWY
JOB NO. 8-HW-32, NORTH KONA

PRELIMINARY
SUBJECT TO CHANGE
be approximately 9,000 lineal feet and will tie in to either end of the privately installed waterline.

The purpose of this project is to provide additional distribution capacity for the North Kona water system from the lands of Puapuaa and north to Kailua in the service zone below elevation 225’. This zone represents a large portion of the urban core of the Kailua Kona area which includes beach resorts, commercial, light industrial areas, condominiums and residential areas. Recent increases in population growth and development has fueled demand for additional water service. With the completion of the Puapuaa tank storage capacity for the system has been increased and the construction of this new 16-inch distribution line will enable the DWS to provide adequate water delivery.

The objectives of this project are to address the distribution limitations for this system. Benefits gained will be the ability of the DWS to increase distribution capacity to meet demands for the system service area.

C. Ownership

The 16" waterline and appurtenances will be owned by the Department of Water Supply, County of Hawaii. The waterline will be installed in the road rights of ways which are owned by the County of Hawaii.

D. Project Schedule and Cost

The proposed project schedule which is subject to change is as follows:

Proposed Project Schedule:

<table>
<thead>
<tr>
<th>Process</th>
<th>Dates</th>
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</thead>
<tbody>
<tr>
<td>Public Process</td>
<td>May 2004 - October 2004</td>
</tr>
<tr>
<td>Field Survey</td>
<td>June - August 2004</td>
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<tr>
<td>Engineering Design</td>
<td>August 2004 - December 2004</td>
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<td>and Review</td>
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<tr>
<td>Bid Process</td>
<td>January 2005</td>
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<tr>
<td>Award &amp; Execution</td>
<td>February 2005 - March 2005</td>
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<tr>
<td>of Contract</td>
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<tr>
<td>Construction</td>
<td>April 2005 - October 2005</td>
</tr>
</tbody>
</table>
The estimated preliminary construction cost of the project is approximately Two Million Dollars ($2,000,000.00). Funding for this project will come from the Department of Water Supply Capital Improvement Project (CIP) monies.

E. Consultation with Agencies, Organizations and Individuals

The following have been contacted during the preparation of this environmental assessment and during the review period.

- County Department of Water Supply
- County Planning Department
- State DLNR Historic Preservation Division
- County Department of Public Works
- County of Hawaii Police Department
- United States Fish & Wildlife Service
- Hawaii Leeward Planning Conference
- Kona-Kohala Chamber of Commerce
- Kailua-Kona Public Library
- Curtis Tyler, III, Councilman
- Kona Traffic Safety Committee
- Kona Outdoor Circle
- West Hawaii Today Newspaper
- Peter Hendricks, Deputy Managing Director, Kona Mayor's Office

A public informational meeting for the Kuakini Highway 16-Inch Waterline Improvements was advertised for in the local newspapers and held on August 31, 2004 at 6:00 p.m. at the Kealakehe Intermediate School Cafeteria. See Appendix C for information and handouts given at the meeting.

This draft environmental assessment was prepared using information gathered from previously published documents (See Reference Listing) and formal and informal contacts with the agencies, committees, organizations and individuals listed above.

The Department of Water Supply also has plans to maintain updates on the status of this project on its internet website located at http://www.hawaiidw.org.
Figure 4 - Portion Soil Survey Map
Sheet 85 & 93, Soil Survey of Island of Hawaii
PART 2

ENVIRONMENTAL SETTING

Physical Environment Characteristics

A. Soils

Soils in the area along the alignment are classified as rPYD, WHC & rKED per the "Soil Survey of Island of Hawaii, State of Hawaii," by the Soil Conservation Service. See Figure 4.

Symbol rPYD represents “Punalu‘u extremely rocky peat, 6 to 20 percent slopes” soil series, with erosion factor K=0.02, and falls in hydrologic group “D.” The Punalu‘u series consists of well-drained thin organic soils over pahoehoe lava bedrock. These soils are gently sloping to moderately steep. They are generally at an elevation ranging from near sea level to 1,000 feet and may receive 20” to 50” of rainfall annually. These areas are characterized by rock outcrops occupying 40 to 50 percent of the surface of this soil. This soil is low on the leeward side of Mauna Loa. The peat is rapidly permeable whereas the pahoehoe is very slowly permeable. Runoff is slow and the erosion hazard is slight. These soils are generally used for pasture. The natural vegetation might consist of koa haole, Christmas berry, guinea grass, natal redtop, and sand bur.

Symbol WHC represents “Waiaha extremely stony silt loam, 6 to 12 percent slopes,” soil series, with erosion factor K=0.10, and falls in hydrologic group “D”. The Waiaha Series consists of shallow, well drained silt loams that formed in volcanic ash. These soils are nearly level to moderately steep and most areas are extremely stony. They are on uplands at an elevation ranging from near sea level to 1,000 feet. They receive from 20 to 40 inches of rainfall annually, most of which falls during the summer months. The natural vegetation consists of kiawe, koa haole, natal redtop, lantana, guinea grass, and bermuda grass. This soil is low on the leeward side of Hualalai and Mauna Loa. Permeability is moderately rapid, runoff is slow, and the erosion hazard is slight. This soil is generally used for pasture and orchards.

Symbol rKED represents “Kaimu extremely stony peat, 6 to 20 percent slopes,” soil series, with erosion factor K=0.02, and falls in hydrologic group “A.” The Kaimu series consists of well-drained thin organic soils over ‘A‘a lava. These soils are gently sloping to moderately steep. They are generally at an elevation ranging from near sea...
level to 1,000 feet and receive 40 to 60" of rainfall annually. Permeability is rapid, runoff is slow, and the erosion hazard is slight. This soil is not suited for cultivation. Small areas are used for pasture. The natural vegetation might consist of Christmas berry, guava, guinea grass and lantana.

B. General Climate

Average annual rainfall ranges from 20 to 50 inches and with temperatures ranging in the 60's to the 80's Fahrenheit. Winds are light and variable generally from the south west. The ground elevation at the tank site is about 325 feet above sea level.

C. Flood Hazards

Federal Insurance Rate Maps (FIRM), indicates the project alignment to cross three drainage ways. Kuakini Highway traverses the Keopu/Hientaloli, Waiaha and Waiaha Split flow No.2 drainage ways. See Figure 5.

Since the pipeline will be buried within the roadway prism, installation of the proposed improvements will not present a flood hazard to surrounding areas, nor will it be susceptible to flooding damage from the surrounding area. The pipeline will not interfere with any culverts or crossings and thus will not alter or impede flood flows nor is it anticipated to be affected by flood flows.

D. Volcanic and Seismic Hazard

The Kuakini Highway alignment is located on the lower southern slopes of Hualalai Mountain which is one of five major volcanoes forming the island of Hawaii. The slopes of Hualalai are located in Volcanic Hazard Zone 4. The island of Hawaii is divided into zones according to the degree of hazard from lava flows. Zone 1 is the area of greatest hazard and Zone 9 is of the least hazard.

Per the Uniform Building Code, the entire Island of Hawaii has been classified to be in Seismic Zone 4. Design of buildings and structures must comply with seismic Zone 4 criteria.
E. Flora and Fauna

The alignment of the waterline will be under and along existing roadway pavement and connecting to existing waterlines and therefore should have no effect to flora or fauna along the new pipeline. Some sections of the line will be within unpaved areas of the roadway shoulder.

Mongoose, rats, mice, wild cats, and common birds might be expected to traverse the roadway and possibly inhabit unpaved or unimproved areas within the right of way.

Per the United States Fish and Wildlife Service (USFWS), the project site is within an area where the Newell's shearwater (Puffinus auricularis newelli), a federally listed threatened species, is known to fly. Newell's shearwaters become confused by bright lights at night and may circle around the lights until they become exhausted and fall to the ground where they may be injured or killed by vehicles or predators. Flyover by the shearwaters occurs during the nesting season which runs from mid-April through November. USFWS indicates that if during the nesting season work is limited to daylight hours without the use of bright lights for night work, the project will likely avoid detrimental effects to the shearwaters.

F. Historic Sites

SHPD indicates that a burial site is situated in the County right-of-way within TMK: (3) 7-5-009. There is a burial monument in the sidewalk near the south entrance/exit of the Coconut Groove Marketplace parking area. SHPD requests that DWS provide an opportunity to review construction plans in order to evaluate what protective measures, if warranted, are appropriate.

In addition, SHPD is concerned that excavations could possibly puncture existing lava tubes in the area of the burial. If this should happen, the lava tubes need to be examined by an archeologist and recommendations be made for mitigative measures if warranted.

G. Existing Land Use

Existing land use abutting the Kualini Highway right-of-way varies. Typical uses
include resort, commercial, residential, agricultural and vacant lands. Some of the vacant lands are used as pasture and others are in construction as a time share and/or residential developments.

The project alignment traverses several different County of Hawaii zoning districts. Zoning along the alignment include V-7.5, CV-7.5, OPEN, V-1.25, RM-1, RM-2, RM-1.25, V-1, RS-15, RM-4, CV-10, RD-3.75, A-1a, RM-4, RM-7, and U.

The County of Hawaii General Plan land use allocation map designates the following along the alignment: Resort, Medium Density, Flood Plain, Alternate Urban Expansion, and Low Density.

State Land Use District classification system designates the area as Urban and Agricultural.

H. Cultural Resources

In terms of cultural resources, this project is not expected to significantly affect traditional native Hawaiian cultural practices or other traditional cultural practices that might be occurring in the surrounding areas.

This project would not restrict access to surrounding areas which may be used for cultural practices. This project will also not restrict access to makai shoreline areas or mauka mountain areas which might be used for cultural practices.

I. Scenic Resources

Since the entire length of pipeline will be buried underground, there will be no effect to scenic resources when constructed.
PART 3

SUMMARY POTENTIAL IMPACTS 
AND MITIGATION MEASURES

A. Short Term Construction Impacts

Construction activity related to the proposed waterline and appurtenances will create short term impacts on the surrounding environment such as noise, dust, and traffic impacts. These impacts would occur only during the construction phase of the project and is temporary in nature.

Heavy equipment noise may be mitigated by allowing work only during normal working hours. The contractor shall also be required to maintain his equipment with appropriate mufflers and noise suppressors in accordance with state regulations.

Ambient air quality will be affected by equipment emissions and construction generated dust. Dust can be managed by the Contractor using water sprinkling, limiting exposed areas, and covering the exposed trench areas with trench plates as soon as practicable. Equipment must be properly maintained to assure efficient operation in terms of fuel combustion to assure the cleanest possible exhaust emissions.

To minimize soil erosion, runoff, and sedimentation, the Contractor shall employ necessary measures to insure compliance with the County of Hawaii Grading Ordinance, and the applicable State Department of Health Pollution Control Standards. If construction dewatering is to be done, the contractor shall obtain necessary permits for the discharge of construction dewatering. The Contractor shall also be required to implement a Best Management Practices Plan as prescribed by the National Pollution Discharge Elimination System (NPDES) permit as administered by the State Department of Health, if required.

Traffic impacts will be mitigated by instituting a traffic control plan approved by the County of Hawaii Department of Public Works. Construction road work and material deliveries shall be scheduled to minimize the disruption to traffic.
B. LONG TERM IMPACTS

No long term major negative impacts are expected as a result of this project. This project will benefit the local community by increasing the dependability of the North Kona water system.

C. PERMITS AND APPROVALS

Construction plans will be submitted to the following agencies for review and approval signatures:

- Department of Water Supply
- Department of Public Works
- Planning Department
- State Department of Health

The following is a list of permits that may be required:

- State of Hawaii Dept. Of Health NPDES General Permit Coverage:
- Hydro Testing Water
- Community Noise Permit for Construction
- County Grading Permit

No Land Use Permits are required for the proposed project.
No Review against the SMA guidelines is required.
PART 4

ALTERNATIVES TO THE PROPOSED ACTION

A. No Action

The "No Action" alternative will not allow the objectives of the proposed project to be achieved. This alternative will result in no physical change to the water system and surrounding area and have no impacts. The Department of Water Supply will not be able to provide dependable water service to the public.

There will be no benefits realized by the community.

B. Alternate Action

No alternate action was considered for this project.

PART 5

RELATIONSHIP TO PLANS AND POLICIES

A. The General Plan Hawaii County, November 1989:

Some of the listings under Section 4. Goals, Policies and Standards, Public Utilities, WATER, POLICIES, are as follows:

- Water system improvements and extensions shall promote the County's desired land use development pattern.
- All water systems shall be designed and built to Department of Water Supply standards
- Improve and replace inadequate systems.
- Water system improvements should be first installed in areas which have established needs and characteristics, such as occupied dwellings and other uses, or in areas adjacent to them if there is need for urban expansion, or to further the expansion of the agricultural industry.
• The fire prevention systems shall be coordinated with water distribution 
  systems in order to ensure water supplies for fire protection purposes.

Under STANDARDS, the following:
• Water Systems shall meet the requirements of the Department of Water 
  Supply and the Subdivision Control Code.

And under G. SOUTH KONA, (S) PUBLIC UTILITIES, (a) WATER, Courses 
  of Action, the following:
• Increase the capacity of the booster pump stations as required.
• Improve the system along Alii Drive. Reservoirs to serve this area should be 
  balanced with the Kailua and Keauhou reservoirs.
• Improve the size of the water line and provide an additional reservoir in the 
  Keauhou area.
• Construct new reservoirs as needed.

Under (8) LAND USE, Courses of Action, the following:
(c) SINGLE FAMILY DEVELOPMENT
• Improve and develop roadways, water and sewage systems, and other basic 
  facilities necessary to encourage development of lands suitable for residential 
  use.

(g) RESORT
• Improve and provide adequate roadways, sewer and water systems, and other 
  basic amenities in all areas where higher density uses are allowed.

Implementation of this project would comply with many objectives of the General 
  Plan Goals, Policies and Standards listed above.

B. Kona Regional Plan (1982):
Some of the goals and policies of the Kona Regional Plan for Water Infrastructure, 
  Chapter V, include the following:
• Ensure that adequate, efficient and dependable public utility services will be 
  available to users.
• Maximize efficiency and economy in the provision of utility services.
• Improve and replace inadequate systems.
• The fire prevention distribution system shall be coordinated with water 
  distribution systems in order to ensure water supplied for fire-fighting systems.
Recommendations of the plan included:

- Implement the improvements proposed for Kona by the Water Master Plan, dated December 1980, and
- The location and timing of major water system improvement should be coordinated with other infrastructural improvement and with overall community priorities.

Implementation of this project meets objectives of the Kona Regional Plan Goals, Policies and Standards listed above. Construction of this 16-inch waterline and appurtenances will ensure that adequate, efficient and dependable utility services such as water will be available to users.

C. Master Plan for Kailua-Kona (April 1994)
Under Section 3.5 INFRASTRUCTURE, 3.5.2 Recommended Water System Upgrades, the following was noted:

"The required fire flows and the high demand of water usage from the designated resort areas of the proposed Master Plan will dictate that ultimately new water storage facilities be built. .... In the ultimate development phase the water lines that currently serve the resort area will become undersized and new 12-inch lines will be required to maintain demand and fire flows. An additional line will be required to be built parallel to Queen Kaahumanu Highway to complete a looped system for the Master Plan Area".

With the recent completion of the Puapua 2.0 MG reservoir recommendations for water storage facilities are being addressed, and now with the proposed construction of the 16-inch waterline along Kuakini Highway, the requirement for larger distribution watertlines will be addressed as well. Therefore, implementation of this project meets the general goals and objectives for infrastructure as outlined in the Master Plan for Kailua-Kona.
PART 6

DETERMINATION

The proposed project is intended to benefit residents, farmers, tourists, agricultural and commercial activities for North Kona and is not expected to significantly impact the surrounding environment. Any impacts will likely be short term and minimal, and generally be related to the construction activity. Therefore, it is determined that the issuance of a Finding of No Significant Impact (FONSI) declaration is appropriate for this project.
PART 7

FINDINGS AND REASONS

In determining the issuance of a Negative Declaration and Finding of No Significant Impact (FONSI), the proposed action was reviewed and found to have no significant impact on the following significance criteria.

• Involves the loss or destruction of any natural or cultural resource;
  The proposed project is not anticipated to involve any loss or destruction of archaeological sites or cultural resources. While there is a burial in the vicinity of the right-of-way, determination will be made during the design stage regarding any effects to the burial site. SHPD will assist during the survey and design stage regarding the waterline alignment and possible impacts to the burial site.

• Curtails the range of beneficial uses of the environment.
  This project will not curtail beneficial use of the environment.

• Conflict with the State's long-term goals or guidelines and expressed in Chapter 344 HRS.
  This proposed project is consistent with the Environmental Policies, goals, and guidelines established in Chapter 344 HRS.

• Substantially affect the economic or social welfare of the community or state.
  Short term economic benefits will be realized by construction employment and spending in the area. Long term effects would be to allow normal economic growth to proceed without delay due to substandard water system.

• Substantially affects public health.
  This project will not substantially affect public health. Any probable public health effects would be related to construction activity which is temporary and short term in nature. The contractor will be required to comply with all Department of Health rules and regulations related to his actions.

• Involves substantial secondary effects such as population changes or infrastructure demands.
  The proposed waterline upgrade is intended to provide adequate uninterrupted water flow and fire protection because the existing system distribution is undersized. These improvements are intended to satisfy existing and planned future water usage demands and to accommodate planned economic growth patterns of the area. Thus, this project will not result in substantial secondary effects.

Final Environmental Assessment:  
Kaukakai Highway 16-Inch Waterline Improvements  
Page 14
• Involves substantial degradation of environmental quality.
  Once completed, the waterline will not affect environmental quality. Any effects on environmental quality will be short term and related to construction activity and will generally be confined to the improved right of way. The contractor will be required to comply with all State of Hawaii Department of Health environmental and pollution control rules and regulations.

• Is individually limited but cumulatively has considerable effect on the environment, or involves a commitment to larger actions.
  The proposed project does not involve a commitment to larger action. The proposed waterline replacement is intended to upgrade portions of the existing system. The Department of Water Supply is constantly upgrading and expanding the water system as demand requirements dictate.
  Planning, design and construction of future improvements depends upon DWS capital improvement program priorities and funding availability.

• Substantially affects a rare, threatened or endangered species or its habitat. Following the recommendations of the US Fish & Wildlife Service, any effect to the Newell’s shearwater, which flies over the project area during nesting season will be mitigated.

• Detrimentally affects air or water quality or ambient noise levels.
  Once completed, the reservoir and waterline will not detrimentally affect air or water quality or ambient noise levels. Any effects to be noted will be short term and related to construction activity.
  During construction the contractor is required to comply with all state and county regulations related to air and water quality and to mitigate noise levels related to his construction equipment and activity.

• Affects an environmentally sensitive area, such as a flood plain, tsunami zone or erosion prone area, geologically hazardous land, estuary, freshwater area, or coastal waters.
  The improvements will not affect any environmentally sensitive area. The Alignment crosses three floodways but will not cause any negative effects since the pipeline will be installed within the existing roadway.

• Substantially affects scenic vistas and view planes identified in county or state plans or studies.
  This project will not affect scenic vistas or view planes since it will not be visible once completed.

• Requires substantial energy consumption.
  This project will not require substantial energy consumption.
REFERENCES


The General Plan Hawaii County, November, 1989, County of Hawaii

Kona Regional Plan, 1982, Prepared by County of Hawaii, Department of Planning, Hilo, Hawaii.


Puapuapu 2.0-M.G. Concrete Reservoir and Supporting Facilities, Final Environmental Assessment (FONSI), November 2001, Prepared for Department of Water Supply, Prepared by Inaba Engineering, Inc.


Staff, Department of Water Supply, County of Hawaii, Hilo, Hawaii

Staff, Planning Department, County of Hawaii, Hilo, Hawaii

APPENDIX A

Pre-Assessment Comment Letters

Draft EA Comment Letters
We are in receipt of your letter, dated March 29, 2004, requesting our pre-consultation comments in connection with your preparation of a draft Environmental Assessment for the proposed Department of Water Supply project.

We understand the project to include the construction of a 16-inch asbestos iron pipeline within the Kukui Highway right-of-way. The approximately 9,000 linear feet pipeline will run from the Pupua Road Site to the Hualalai road intersection. The purpose of the project is to upgrade the existing 8-inch pipeline and improve water distribution from the recently completed Paupua 2.0 million-gallon reservoir and to balance flows with the Pali Road 16-inch waterline.

The project area, between the centerline of the Kukui Highway right-of-way and the makai right-of-way boundary is in the Hawaii County Special Management Area (SMA). The project area traverses through several different zoning districts and both the State Land Use Agricultural and Urban districts.

Rule 9-4(10B) of the Planning Commission Rules of Practice and Procedure lists the various uses, activities, or operations that have been determined to be exempt from the definition of "development." Subsection (xiv) provides that the installation of underground utility lines and appurtenant aboveground fixtures less than four feet in height along existing conduits is among the list of exempt uses, activities, or operations. Therefore, no review of the project, as described, against the SMA guidelines is required.

Pursuant to §23-4-11, Hawaii County Zoning Code, and §205-4.5, Hawaii Revised Statutes, public and private utilities are permitted in any district. Therefore, no land use permits are required for the proposed project.

Thank you for the opportunity to comment on the proposed project. Should you have questions, please feel welcome to contact Larry Brown or Esther Acuna of my staff at 961-8288.

Sincerely,

CHRISTOPHER J. YUEN
Planning Director

CC: Mr. Glenn Akana, DWS
Planning Dept. – West Hawaii Office

Jason K. Inoue, P.E.,
Inaba Engineering, Inc.
Page 2
April 8, 2004
April 12, 2004
Jason K. Inaba, P.E.
Inaba Engineering, Inc.
273 Waiamea Avenue
Hilo, HI 96720

Subject: Pre-environmental Assessment Consultation
Koahuli Highway 16-inch Waterline Improvements
Department of Water Supply Job No. 2003-221
North Kona, Hawaii
TMK: 7-3-008, 009, 017, 019, 020

We received your request dated March 29, 2004 and have the following comments:

1. Trench patching of paved area shall be allowed only if the pavement outside the trench has not been damaged and was in need of resurfacing prior to the project. The entire trench line shall otherwise be re-paved after removing the old pavement by cold planning.

2. Traffic disruptions shall be minimized.

3. All earthwork and grading shall conform to Chapter 10, Erosion and Sediment Control, of Hawaii County Code.

4. The applicant shall comply with Chapter 11-55, Water Pollution Control, Hawaii Administrative Rules, Department of Health, which requires an NPDES permit for certain construction activity.

If you have any questions, please contact Kimono Kuroki at our Kona office at 327-3530.

K. Kishio M. Kuroki, Division Chief
Engineering Division

May 5, 2004

Mr. Bruce C. McClure, P.E., Director
Department of Public Works
County of Hawaii
101 Pauahi Street, Suite 7
Hilo, Hawaii 96720

Subject: PRE-ENVIRONMENTAL ASSESSMENT CONSULTATION for
Koahuli Highway 16-inch Waterline Improvements
Department of Water Supply Job No. 2003-221
North Kona, Hawaii
TMK: 3-3-008, 009, 017, 019, 020

Dear Mr. McClure,

Thank you for your letter dated April 12, 2004 regarding the environmental review for the subject project. We offer the following responses to DPW comments.

1. Trench patch requirements will be coordinated with the DPW during the design phase of the project and will be incorporated into the design documents as needed.

2. Traffic control considerations will be coordinated with the DPW during the design phase of the project and traffic control plans will be included in the design documents.

3. The contractor will be required to conform to Chapter 10, Erosion and Sediment Control, of the Hawaii County Code.

4. This project will comply with Chapter 11-55, Water Pollution Control, Hawaii Administrative Rules, Department of Health, which may require an NPDES permit for certain construction activity.

Your comments and responses will be included in the environmental assessment documents. Should you have any questions or require additional information, please feel free to call this office at 961-3727.

Very truly yours,

INABA ENGINEERING, INC.

copy: Glenn Akusa, DWS
May 10, 2004

Mr. Jason Inaba
Inaba Engineering, Inc.
273 Wallacourt Avenue
Hilo, Hawaii 96720

LOG NO: 2004.1468
DOC NO: 04084808

Dear Mr. Inaba:

SUBJECT: Chapter 6E-8 Historic Preservation Review [County/Department of Water Supply] Pre-Environmental Assessment Consultation, Job No. 2003-821,
Haulii Highway 16-Inch Waterline Improvements
North Kona District, Hawaii

THK: (3) 7-5-009, 009, 017, 019, 020

Thank you for your letter dated March 29, 2004 with your request for our comments on this proposed project. We understand the Hawail County Department of Water supply plans to construct 4000 feet of pipeline from the Puopola Tank site to the Haulii Road intersection, within the existing paved roadway or shoulders.

Our records indicate that a burial site is situated in the County right-of-way within THK (3) 7-5-009. We are unsure, based on the maps provided, whether the proposed waterline construction will have an adverse effect on this site. We would therefore welcome an opportunity to review your specific plans and evaluate what protective measures, if warranted, are appropriate.

In addition to the matters described above, if the excavations for this waterline exceed the depth previously graded for construction of the Haulii Highway or its shoulders, lava tubes could be punctured. If this occurs we ask that you have an on-call qualified archeologist to examine any such tubes in proximity to the affected area, and recommend mitigative measures if needed. A monitoring plan outlining the details of this arrangement should be submitted for review and approval prior to beginning construction.

If you have questions or concerns, please contact Mary Anne Maier, Hawaii Island Assistant Archaeologist (808-327-3690), or Dr. Patrick McCoy, Hawaii Island Archaeologist, (808-692-8029).

Aloha,

P. Holik McDowell, Administrator
State Historic Preservation Division

Kanani Markell, Burial Sits Program
Ruby McDonald, Hawaii Island Burial Council

Majan
May 24, 2004

P. Holly McElhowny, Administrator
Department of Land and Natural Resources
State Historic Preservation Division
Kahului Building, Room 555
601 Kamohia Boulevard
Kapolei, Hawaii 96707

Subject: Historic Preservation Review for Kuakini Highway 16-Inch Waterline Improvements
Department of Water Supply Job No. 2003-821
North Kona, Hawaii
TMK: 3rd Dist., 7-5-008, 009, 017, 019, 020

Dear Ms. McElhowny,

Thank you for your review and comments letter dated May 10, 2004. (Log No 2004-1468, Doc No 040398M06). In consultation with, and on behalf of the Department of Water Supply, we offer the following response to your comments.

Regarding the burial site situated in the County right-of-way within TMK 7-5-009: We will coordinate with your Hawaii Island Assistant Archaeologist during the field survey stage to locate the burial site monument. During the design stage, we will submit plans to your office for comments regarding the location of the waterline in relation to the burial monument.

Regarding depth of excavations for waterline: Currently, there are existing 8' & 20' waterlines and a sewer main which runs along the length of Kuakini Highway Right-of-Way. Typically, the new 16' waterline will not be placed as deep as the existing sewer main and will be placed at a similar depth of the 20' waterline. The DWS also does not recall having any information regarding previous construction of the existing water lines impacting any lava tubes.

P. Holly McElhowny, Administrator
May 24, 2004
Page 2 of 2

If during the construction of this project the contractor encounters any lava tube, bones or artifacts, the contractor will be required to stop work immediately in the area and to notify the DWS and Historic Preservation Division for mitigative measures. At this time, the DWS will implement its emergency procurement process to hire an archeologist to recommend mitigative measures if needed.

Should you need any further information or have any questions, please call me at 961-3727 or contact Mr. Glenn Alama of the Department of Water Supply at 961-8070.

Very truly yours,

[Signature]

[Name]

Attach

cc: Mr. Glenn Alama, DWS
Christopher Yuan, Planning
In Reply Ref: 01-04-522

Jason K. Inaba
Inaba Engineering, Inc.
237 Waialae Avenue
Hilo, Hawaii 96720

Dear Mr. Inaba:

Thank you for your March 29, 2004, letter requesting information on federally listed or proposed threatened or endangered species or critical habitat that may be present near the Kukui Highway 16-inch waterline improvement project in North Kona, Hawaii (TMDL 3-7-5-005, 009, 017, 019, and 020). This proposed project will upgrade the existing waterline by installing 9,000 feet of pipeline in paved portions of the roadway or within the shoulder areas of the highway. Your letter was received in our office on March 31, 2004.

Based on the review of the information contained in your project summary and in our files, including maps prepared by the Hawaii Natural Heritage Program, the proposed project site is in an area through which the Newell’s stowiwater (Phalacrocorax suberieus novelli), a federally listed threatened species, is known to fly. Newell’s stowiwaters become confused by bright lights at night and may circle around the lights until they become exhausted and fall to the ground where they are injured or killed by vehicles or predators. However, if the project is constructed during November, we maintain the project would likely avoid take (that includes harrying, harassing, wounding, and/or killing).

We appreciate the opportunity to comment on the proposed project. If you would like to further discuss our recommendation for avoiding take of endangered species, please contact Fish and Wildlife Biologist Elizabeth Shaw by telephone at (808) 792-9400.

Sincerely,

Christie Parkes
Acting Field Supervisor

Jeff M. Newman
Acting Field Supervisor
United States Department of the Interior
Fish and Wildlife Service
Pacific Islands Region
300 Ala Moana Boulevard, Room 3-22
Honolulu, Hawaii 96814

Subject: Reference: P2-04-163
PRE-ENVIRONMENTAL ASSESSMENT CONSULTATION for
Kukui Highway 16-inch Waterline Improvements
Department of Water Supply Job No. 2003-211
North Kona, Hawaii
TMDLs: 71-005, 009, 017, 020

Gentlemen,

Thank you for your letter dated May 21, 2004 regarding U.S. Fish and Wildlife Service (USFWS) concerns for the subject project. We note that USFWS indicates the project site in an area where the Newell’s stowiwater is known to fly during its nesting season which runs from mid-April through November. During this period, the stowiwaters' normal behavior may be negatively affected at night by bright lights.

To minimize adverse project-related impacts, the Department of Water Supply will specify in contract documents and plans that the contractor is to perform all work activities during daylight hours. If during the course of the project the contractor determines that night work is necessary, the DWS would only allow night work during the non-nesting season of December through March.

Should you need any further information or have any questions, please call me at 961-3727 or contact Mr. Glenn Ahuna of the Department of Water Supply at 961-5070.

Very truly yours,

Jeff M. Newman, Acting Field Supervisor

Copy: Mr. Glenn Ahuna, DWS
INABA ENGINEERING, INC.
CIVIL ENGINEERING • STRUCTURAL ENGINEERING • LAND SURVISING
92-1394 Kaaawa Rd. Kaaawa, Hawaii 96730

July 13, 2004

Mr. Golen M. Koba, P.E., Division Chief
Engineering Division
Department of Public Works
County Of Hawaii
101 Pauahi Street, Suite 7
Hilo, Hawaii 96720

SUBJECT: DRAFT ENVIRONMENTAL ASSESSMENT
Kahului Highway 16-inch Waterline Improvements
DWS Job No. 2003-821
North Kona, Hawaii

Thank you for your letter dated June 6, 2004 regarding the Draft Environmental Assessment review for the subject project. On behalf of the Department of Water Supply, we offer the following response to your comments:

1. Installation of the new 16" waterline will take into consideration storm runoff in the vicinity of the Waiaka Splitflow. The pipeline in that area will be designed for flood and erosion resistance and will be coordinated with the Department of Public Works.

Your comment letter and this response will be included in the final environmental assessment document. Should you have any questions or require additional information, please feel free to call Mr. William Atkins of the DWS at 961-9376 ext. 254, or this office at 961-3273.

Very truly yours,

INABA ENGINEERING, INC.

[Signature]

[Copy: William Atkins, DWS]
July 13, 2004

Ms. Genevieve Salomonson, Director
Office of Environmental Quality Control
235 South Beretania Street
State Office Tower, Suite 602
Honolulu, Hawaii 96813

Subject: DRAFT ENVIRONMENTAL ASSESSMENT
Kukui Highway 16-inch Waterline Improvements
North Kona, Hawaii

TMK: 3rd Dist. 7-2-600-060-017-030-020

Dear Ms. Salomonson,

Thank you for your letter dated July 12, 2004 regarding the Draft Environmental Assessment review for the subject project. On behalf of the Department of Water Supply, we offer the following response to your comments:

1. The final document will be printed on both sides.

2. Community consultation will be addressed in the draft review process. To date, the following have been notified: Pu‘u Kuleia Chamber of Commerce, Kona Outdoors Circle, Hawaii LEDDP Planning Conference, Kona Traffic Safety Committee, West Hawaii Today newspaper.

3. It is noted that the proper draft EA determination is an "anticipated PONS".

Your comments and this response will be included in the final environmental assessment document. Should you have any questions or require additional information, please feel free to call Mr. William Atkins of the DWS at 961-8070 ext. 254, or this office at 961-3727.

Very truly yours,

INABA ENGINEERING, INC.

[Signature]

[Stamp]

In our office: William Atkins, DWS

[Stamp]
July 26, 2004

Mr. Jason K. Inaba, P.E.
Inaba Engineering, Inc.
273 Wainiha Ave
Hilo, Hawaii 96720

Dear Mr. Inaba:

SUBJECT: ENVIRONMENTAL ASSESSMENT CONSULTATION for Kuakini Highway 16-Inch Waterline Improvements
Department of Water Supply Job No. 2003-821
North Kohala, Hawaii
THKC: 3rd Div. 7-5-00B, 009, 017, 019, 020

Our staff has reviewed the above-referenced Environmental Assessment Consultation and recommends that during construction, at least one lane of roadway be left open for vehicular traffic.

Sincerely,

LAWRENCE K. MAHUNA
POLICE CHIEF

THOMAS J. HICKCOX
ASSISTANT POLICE CHIEF
AREA II OPERATIONS

County of Hawaii
POLICE DEPARTMENT
340 Kamuela Ave
Hilo, Hawaii 96720

October 3, 2004

INABA ENGINEERING, INC.
CIVIL ENGINEERING & STRUCTURAL ENGINEERING & LAND SURVEYING
273 WAINIHA AVENUE
HILO, HAWAII 96720

August 2, 2004

Lawrence Mahuna, Chief of Police
Hawaii Police Department
County of Hawaii
349 Kapolei Street
Hilo, Hawaii 96720

Subject: ENVIRONMENTAL ASSESSMENT CONSULTATION for Kuakini Highway 16-Inch Waterline Improvements
Department of Water Supply Job No. 2003-821
North Kohala, Hawaii

Gentlemen:

Thank you for your recent letter dated July 26, 2004 regarding the subject project. The Police Department recommends that at least one lane of vehicular traffic be left open during construction. On behalf of the Department of Water Supply, the following response to your comments are noted.

During the construction phase, the project contractor will be required to provide at least one lane for traffic movement at all times during working hours for the Department of Public Works requirements for work within the County right of way. Should any lane closures be necessary, a “Public Notice” will be provided in an island newspaper to inform the public.

Should you have any questions or require additional information, please feel free to call William Atkins of the Dept. Of Water Supply at 961-8070, ext. 254 or this office at 961-3727.

Very truly yours,

INABA ENGINEERING, INC.

[Signature]

Ext.

c: William Atkins, DWS
August 3, 2004

Jason K. Inaba, P.E.
Inaba Engineering, Inc.
273 Waiauenue Avenue
Hilo, Hawaii 96720

Dear Mr. Inaba,

Re: Waterline Improvements along Kuakini Highway (Job No. 2003-021)

Thank you for the opportunity to review the environmental assessment for the proposed waterline upgrade along Kuakini Highway. The Kona Outdoor Circle’s comments and suggestions are as follows:

1. Determine if any other work could be completed while the road is torn-up and coordinate that work. (Note: Waterline improvements closed this road just a couple years ago, if this project could have been anticipated, perhaps we would not be facing another road closure.)

2. Review the impacts on the lava tubes and burial site and distribute the report to those included in the distribution of this EA for further discussion. Since this is an “improvement” project we do not recommend proceeding with this project until these concerns are mitigated.

3. The Newell’s shearwater’s nesting season runs from April through November. Please insure that the project does not coincide with the nesting season to avoid any detrimental effect to this threatened species.

4. The recent rain has given us a taste of what a mauka flood could do to the makai lands. Was this project examined with recent flood data considering all the landscape changes that have occurred on the slopes of Hualalai in the past few years? If not, please reevaluate the project using current information.

5. When the project begins, please restrict the work to off-peak hours to reduce the project's impact on traffic.

Thank you for your time in review of these comments.

Sincerely,

Betty Meyerson
President

Ann C. Peterson
VP - Public Affairs
August 10, 2004

Betty Meyerson, President
INABA ENGINEERING, INC.
733 WAIKIKI BOULEVARD
MAUNA LINO, HAWAII 96713

August 10, 2004

Betty Meyerson, President
INABA ENGINEERING, INC.
733 WAIKIKI BOULEVARD
MAUNA LINO, HAWAII 96713

August 10, 2004

Betty Meyerson, President
INABA ENGINEERING, INC.
733 WAIKIKI BOULEVARD
MAUNA LINO, HAWAII 96713

August 10, 2004

Betty Meyerson, President
INABA ENGINEERING, INC.
733 WAIKIKI BOULEVARD
MAUNA LINO, HAWAII 96713

August 10, 2004

Betty Meyerson, President
INABA ENGINEERING, INC.
733 WAIKIKI BOULEVARD
MAUNA LINO, HAWAII 96713

August 10, 2004

Betty Meyerson, President
INABA ENGINEERING, INC.
733 WAIKIKI BOULEVARD
MAUNA LINO, HAWAII 96713

Subject: Kukui Highway 16-inch Waterline Improvements
Department of Water Supply Job No. 2003-821
NORTH KONA, HAWAII

Dear Ms. Meyerson,

Thank you for your letter of August 3, 2004 regarding the subject project. On behalf of the Department of Water Supply, we offer the following response to your comments and suggestions.

1. The Department of Water Supply (DWS) is coordinating this project with the Department of Public Works. The DWS does note that a sewerline was installed a couple of years ago by a private developer and that this project was not necessary at that time. This project will not involve road closure as the contractor will be required to provide at least one lane of through traffic during construction.

2. The State of Hawaii Department of Land and Natural Resources, State Historic Preservation Division, is included in the review of the EA. The DWS is coordinating with SHPD regarding notification and requirements for addressing potential lava tubes and burial sites.

3. The United States Department of the Interior Fish and Wildlife Service is included in the review of the EA. Comments and recommendations from the USFWS regarding avoiding take of endangered species such as Pueo’s hawaiian owls have been reviewed by the DWS and will be incorporated into the project process.

4. As indicated in the EA, Part 2, Section C. Flood Hazards, the waterline will be buried in the existing roadway prism and will not interfere with any culverts or crossings and thus will not alter the existing condition of flood facilities and will not affect or contribute to flooding after construction is complete. In addition, construction plans will be reviewed by the Department of Public Works for compliance with codes and ordinances.

5. Work will be scheduled and coordinated to minimize impacts to traffic as much as possible.

Should you have any questions or require additional information, please feel free to call William Atkins of the Dept. of Water Supply at 961-8076, ext. 254 or this office at 961-3727.

Very truly yours,

INABA ENGINEERING, INC.

William Atkins, DWS

August 10, 2004

Page 2 of 2
August 7, 2004

Mr. William Atkins
Department of Water Supply
County of Hawaii
345 Kekuanaoa St., Suite 20
Hilo, HI 96720

Re: Kuakini Highway 16-Inch Waterline Improvements

Dear Mr. Atkins:

The Kona Traffic Safety Committee, following careful consideration of the subject matter at its recent meeting, agreed to urge the importance of minimizing traffic congestion in the area while avoiding adverse effects on the threatened Newell's shearwater by: 1) scheduling work during non-peak, including nighttime hours; and 2) avoiding work during the nesting season (April through November).

We believe especially that nighttime work on those portions of the project not near residential areas will benefit the community by minimizing daytime traffic congestion and shortening the time needed to complete the work.

We also urge that sufficient personnel, devices, including warning signs, and public notices be required to help minimize traffic congestion by advising motorists of the work schedule and directing them to alternate routes if available.

In addition, due to recent flooding and the effect of additional development in the project area, please review the effectiveness of flood plain drainage to make any necessary corrections to drainage deficits while the road is under construction.

Sincerely yours,

Joel E. Gimpel, Chair,
Public Affairs

Cc: Office of Environmental Quality Control
    Jason K. Inaba, P.E.
    Members, Kona Traffic Safety Committee
August 10, 2004

Joel E. Gimpel, Chair
Public Affairs
KONA TRAFFIC SAFETY COMMITTEE
75-344 Naia Kailua Drive
Kailua-Kona, Hawaii 96740

Subject: Kukuihi Highway 16-Inch Waterline Improvements
Department of Water Supply Job No. 2003-421
North Kona, Hawaii

Dear Mr. Gimpel,

Thank you for your letter of August 7, 2004 regarding the subject project. On behalf of the Department of Water Supply, we offer the following response to your comments and suggestions.

1. This project is anticipated to be constructed from April 2005 to October 2005. DWS is coordinating schedules with DPW regarding the Kukuihi Highway Improvements Project from Kailua Road to Kona International Airport. Since this period is during the dry season, no night time work is contemplated. Work will be scheduled to reduce the inconvenience to traffic and the overall duration of the project as much as practicable.

2. The window of opportunity to construct this project and avoid going head on with the Kukuihi Highway Improvements from Kailua Road to Kona International Airport is from April to October 2005. Completion prior to October is desired due to the Ironman Triathlon event.

3. The contractor will be required to comply with the Manual on Uniform Traffic Control Devices (MUTCD) and necessary safety requirements for traffic control during the duration of construction.

4. As indicated in the DEA, Part 2, Section C. Flood Hazards, the waterline will be buried in the existing roadway prism and will not interfere with any culverts or crossings and thus will not alter the existing condition of flood facilities and will not affect coastal drainages or contribute to flooding after construction is complete. In addition, construction plans will be reviewed by the Department of Public Works for compliance with codes and ordinances. Unfortunately, effectiveness of floodplain drainage and connectons to drainage systems do not fall under the jurisdiction of the Department of Water Supply nor the scope and purpose of this project.

Should you have any questions or require additional information, please feel free to call William Atkins of the Dept. Of Water Supply at 961-3070, ext. 254 or this office at 961-3727.

Very truly yours,

INABA ENGINEERING, INC.

[Signature]

cc: William Atkins, DWS
APPENDIX B

Photographs of Site
RECEIVED AS FOLLOWS

KUAKINI HIGHWAY
P-3
Coconut Grove
Looking South

KUAKINI HIGHWAY
P-2
Kona Ali Condo
Looking South

KUAKINI HIGHWAY
P-1
Hualalai Road
Intersection
Looking South

PHOTO - 1
KUAKINI HIGHWAY
P-12
Looking North

KUAKINI HIGHWAY
P-11
Puapua Tank.
Connection to Effluent
Line at Highway
Looking North

KUAKINI HIGHWAY
P-10
Onioni Drive/Walua
Road Intersection
Looking South
APPENDIX C

Newspaper Article
Public Meeting Information
Waterline could disrupt traffic

PROPOSAL CALLS FOR KUAKINI HIGHWAY CONSTRUCTION

BY ROBBY COMMAND

Kuakini Highway could become a construction maze for at least six months if an improvement plan by the Water Department is implemented on time.

The county Department of Water Supply has issued a draft environmental assessment for the $2 million Kuakini Highway 16-inch waterline improvement.

With construction scheduled to begin in April and last through October 2005, the nearly two-mile project would coincide with the 18- to 24-month widening of Kuakini Highway between Palani and Hualalai Roads, set to begin as soon as September.

The proposal of the publicly funded water distribution line is to provide adequate water service to subdivisions being developed along Kuakini Highway. Water for the area, which now comes from the stressed 300,000-gallon Palani tank reserve, would come mostly from the new two-million-gallon Puualoa tank.

William Atkins, project engineer for the Water Department, said possible traffic issues have been discussed during meetings.

"We're trying to keep the line along the side of the road," Atkins said. "We're going to try to keep one lane open at all times, and work during non-peak traffic hours."

However, Atkins said the project is designed to meet the increasing demand of the area. "It's my experience that you don't get the efficiency you get during the day."

The Water Department would install 9,000 feet of pipeline, from the newly created Hualalai Street about 3,000 feet north, and then from 700 feet south of Oni Oni Street to the intersection with Kuakini Road. Water line in the 1,000-foot gap would be installed by the developer of the Kona Hawaiian Village time share project.

If work takes place as scheduled, it would also mark the second time in three years that Kuakini Highway south of Puualoa Terrece would be closed for laying pipe. Last year, Schuler Homes laid a sewer line to service its Puualoa Estates project.

It would also mark the third time in five years that the portion of Kuakini Highway near the intersection of Oni Oni and Hualalai Road has been closed for laying pipe. The original Kuakino-Kona sewage system was installed along Kuakini between 1987 and 1992.

Atkins said it is not always easy to time projects to coincide with each other. He added, "We try to keep water lines and sewer lines as apart as possible."

The deadline to comment on the proposed 16-inch waterline along Kuakini Highway is Aug. 7.

Draft environmental analyses are available at the Kaloko-Kona Regional Library, the Department of Water Supply's Kona office in Kealakekua or main office in Hilo, or the Office of Environmental Quality Control.

> WATER: Construction would be from April to October 2005

CONTINUED FROM PAGE 1A

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Atkins said it is not always easy to time projects to coincide with each other. He added, "We try to keep water lines and sewer lines as apart as possible."

The deadline to comment on the proposed 16-inch waterline along Kuakini Highway is Aug. 7.

Draft environmental analyses are available at the Kaloko-Kona Regional Library, the Department of Water Supply's Kona office in Kealakekua or main office in Hilo, or the Office of Environmental Quality Control.
August 16, 2004 (corrected notice)

NOTICE OF INFORMATIONAL MEETING
FOR THE KUAKINI HIGHWAY 16-INCH WATERLINE IMPROVEMENTS,
DWS JOB NO. 2003-821
AND THE
CONSTRUCTION OF KUAKINI HIGHWAY IMPROVEMENTS,
PALANI ROAD TO HUALALAI ROAD, F.A.P. NO. STP-0110(1)

NOTICE IS HEREBY GIVEN that the Department of Water Supply and the Department of
Public Works, County of Hawai‘i, will hold a joint informational meeting in the Kealakehe
Intermediate School Cafeteria located at 75-5062 Onipaa Street, Kailua-Kona, Hawai‘i. This meeting
is scheduled for August 31, 2004, at 6:00 p.m.

The meeting is being held to inform and accept comments from the public concerning the
upcoming construction of a new 16-inch waterline and roadway improvements along Kuakini
Highway.

The 16-inch waterline installation by the Department of Water Supply will extend from
Hualalai Road, along Kuakini Highway, to Nakukuli Drive.

The Kuakini Highway road improvements by the Department of Public Works will extend
from Palani Road to Hualalai Road. Kuakini Highway will be widened to two lanes in each direction
with appropriate pockets for left turns and bicycle lanes through most of the project. This roadway
work also includes the installation of concrete curb, gutter, sidewalks, curb ramps, landscaping, and a
synchronized traffic signal system.

Should there be any questions, the public may contact Mr. Peter Hendricks, Deputy Managing
Director, in Kona at (808) 329-5226.

DEPARTMENT OF WATER SUPPLY
COUNTY OF HAWAI‘I

The Department of Water Supply is an Equal Opportunity Provider and Employer.

Posted on the Internet at:
http://www.hawaiidws.org

Hawaii Tribune Herald
August 22 and 29, 2004

West Hawaii Today
August 22 and 29, 2004

...
Water brings progress...

The Department of Water Supply is an Equal Opportunity provider and employer. To file a complaint of discrimination, write: USDA, Director, Office of Civil
Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington DC 20250-9410. Or call (202) 720-3274 (voice and TDD)
MEETING AGENDA

KI'A KINI HIGHWAY 16-INCH WATERLINE IMPROVEMENTS AND THE CONSTRUCTION OF THE KI'A KINI HIGHWAY IMPROVEMENTS, PALANI ROAD TO HUALALI ROAD INFORMATIONAL

Kealakehe Intermediate School Cafeteria
75-5062 Onipaa Street
Kailua-Kona, Hawaii
6:00 p.m, August 31, 2004, Tuesday

INTRODUCTION:
Mr. Peter Hendricks, Deputy Managing Director, Kona Mayor's Office

PRESENTATION OF INFORMATION
Mr. Allan Simeon, Civil Engineer V, Department of Public Works, County of Hawaii

Mr. Glenn Ahuna, Engineering Division Head, Department of Water Supply, County of Hawaii

COMMENTS BY THE PUBLIC

QUESTIONS AND ANSWERS
KUAKINI HIGHWAY 16-INCH WATERLINE IMPROVEMENTS
Department of Water Supply
DWS Job No. 2003-821

Project Description and Location
Approximately 9,000 linear feet of 16-inch DI pipe to replace existing 8-inch waterline
Extends along Kuakini Highway from Nialokai Drive to Hualalai Road

Project Location Overview

Project Goals
- Replace undersized existing 8-inch pipeline
- Improve hydraulics to fully utilize 2.0 mg reservoir
- Improve domestic and fire flow

New Puapuaa 2.0 MG Reservoir

Mitigative Measures
- Controlled Low Strength Material (CLSM) for trench backfill
- Maintain all existing access at all times
- Coordination of DPW and DWS projects
- Weekly status posted on DWS website
- Work hours from 8:30 am to 3:00 pm
- One-lane, two-way traffic always open, with two-lane traffic when possible
- No night work planned

Status and Proposed Schedule
- Currently under design with EA under review
- Anticipated construction start date: April 1, 2005
- Anticipated completion date: October 1, 2005

Project Completion

Contacts
- Engineering Consultant
  - Isha Engineering Inc.
  - Jason Isha
  - Ph: 961-3727
  - Email: Ishaeng@ite.net
- Department of Water Supply
  - William Atkins, Project Engineer
  - Ph: 961-8070, ext. 254
  - Email: watkins@dws.hawaii.gov

WWW.HAWAIIWATER.COM
<table>
<thead>
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<th>Task Description</th>
<th>Start Date</th>
<th>Duration</th>
<th>End Date</th>
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<td>2/24/2023</td>
<td>10 DAYS</td>
<td>3/3/2023</td>
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<td>FIELD SURVEY</td>
<td>3/4/2023</td>
<td>7 DAYS</td>
<td>3/10/2023</td>
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<tr>
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<td>3/11/2023</td>
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FINISH
## Attendance Sign-in Form

### The Informational Meeting
**Kuakini Highway 16-Inch Waterline Improvements and Kuakimua Highway Improvements**

**August 31, 2004**

(Meeting Date)

<table>
<thead>
<tr>
<th>Name (Print)</th>
<th>Telephone No.</th>
<th>E-mail Address</th>
<th>Affiliation</th>
</tr>
</thead>
<tbody>
<tr>
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<td></td>
<td>Boyce Wilkes Plaza</td>
</tr>
<tr>
<td>Robert Payne</td>
<td>329-4410</td>
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<td>Self</td>
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<td>Niiu Niiu</td>
<td>334-3253</td>
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<td>Wapana Lekane</td>
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<td>NAME (PRINT)</td>
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