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OCT 08 2011

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OFF. OF ENVIRONMENT/
QUALITY CONTROL

September 19, 2011

Mr. Gary Hooser, Director
Office of Environmental Quality Control
235 South Beretania Street, Suite 702
Honolulu, HI 96813

**SUBJECT: DRAFT ENVIRONMENTAL ASSESSMENT (EA)
DEPARTMENT OF WATER, COUNTY OF KAUAI
PIPELINE REPLACEMENT ALONG KUAMO'O AND WAILUA ROADS,
'OHANA AND ANOLANI STREETS AND LEHIA LANE
DISTRICT OF KAPAA, ISLAND OF KAUAI, HAWAII**

Dear Mr. Hooser,

The Department of Water, County of Kauai, has reviewed the environmental assessment for the subject project and anticipates a finding of no-significant impact and requests that you publish notice of availability of this project in the October 8, 2011 issue of the Environmental Notice.

We have enclosed a completed Bulletin publication form and one (1) set of the Draft Environmental Assessment (EA), Determination Letter to Director, Check List, Publication Form, Draft Archaeological Inventory Survey Report and one (1) CD (pdf of Draft EA and Publication form). Please call Dennis Esaki of Esaki Surveying and Mapping, Inc. at (808) 246-0625 if there are any questions.

Very truly yours,

A handwritten signature in black ink, appearing to read "D. Craddick".

David Craddick, P.E.
Manager and Chief Engineer

Attachments

**Publication Form
The Environmental Notice
Office of Environmental Quality Control**

Instructions: Please submit one hardcopy of the document along with determination letter from the agency. On a compact disk, put an electronic copy of this publication form and a PDF of the EA or EIS. Mahalo.

Name of Project: Pipeline replacement along Kuamoo and Wailua Roads, Ohana and Anolani Streets and Lehia Lane

Applicable Law:

Type of Document: Environmental Assessment

Island: Kauai

District: Lihue (Wailua)

TMK: (4) 3-9-06, 4-1-02, 4-1-03, 4-1-04

Permits Required: Environmental Assessment

Name of Applicant or Proposing Agency: Department of Water, County of Kauai

Address: 4398 Pua Loke Street

City, State, Zip: Lihue, HI 96766

Contact and Phone: Dustin Moises - 808-245-5459

Approving Agency or Accepting Authority: Department of Water, County of Kauai

Address: 4398 Pua Loke Street

City, State, Zip: Lihue, HI 96766

Contact and Phone: Dust Moises – 808-245-5459

Consultant: Esaki Surveying and Mapping, Inc.

Address: 1610 Haleukana Street

City, State, Zip: Lihue, HI 96766

Contact and Phone: 808-246-0625

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Project Summary: Summary of the direct, indirect, secondary, and cumulative impacts of the proposed action (less than 200 words).

The County of Kauai, Department of Water proposes to replace waterlines along Kuamoo and Wailua Roads, Ohana and Anolani Streets and Lehia Lane. The immediate impact is temporary traffic inconvenience and interruption in service during the transfer as well as equipment noise, emissions and fugitive dust from construction. Mufflers, water sprinkling and restricted time of work will be implemented. The direct impact will be reliable water service to the homes; indirect input is better fire protection for the surrounding homes and resort. Long term effect is improvement quality of life. Additionally the existing Lehia Lane asbestos concrete waterline is to be replaced with ductile iron pipes, eliminating the potential health hazard.

DRAFT
ENVIRONMENTAL ASSESSMENT
AND
FINDING OF NO SIGNIFICANT IMPACT (FONSI)

WATERLINE REPLACEMENT ALONG KUAMO'O AND WAILUA ROADS,
'OHANA AND ANOLANI STREETS AND LEHIA LANE

WAILUA, LIHU'E AND KAWAIHAU, KAUA'I, HAWAII

Submitted in Accordance with
Requirements for Chapter 343, HRS and
Chapter 200 of Title II, Administrative Rules
Department of Health, State of Hawai'i

Prepared for the

Department of Water
County of Kaua'i

By

Esaki Surveying and Mapping, Inc.

March 2011

ENVIRONMENTAL ASSESSMENT

Proposed Action: WATERLINE REPLACEMENT ALONG KUAMO'O AND WAILUA ROADS, 'OHANA AND ANOLANI STREETS AND LEHIA LANE

Applicant: DEPARTMENT OF WATER
COUNTY OF KAUA'I

Location: WAILUA, LIHU'E AND KAWAIHAU, KAUA'I, HAWAII
TMK: (4) 3-9-06, (4) 4-1-02, (4) 4-1-03 and (4) 4-1-04

Determination: EIS REQUIRED _____ NOT REQUIRED X

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Agencies and Organizations Consulted or Contacted
in Preparing This Assessment

State : Office of Environmental Quality Control
Department of Transportation – Highways Division
DLNR – State Historic Preservation Division

County : Planning Department
Department of Public Works
Department of Water
Fire Department
Police Department

Others : Hawaiian Telcom
Kaua'i Island Utility Cooperative
Oceanic Time Warner Cable
Scientific Consultant Services, Inc.

.....
Possible Permits Required

Federal N/A

State NPDES – Hydrotesting water
Department of Transportation
Highways Division – Road Construction for Right-of-Way

County Public Works – Road Construction for Right-of-Way

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SECTION I

DESCRIPTION OF THE PROPOSED PROJECT

The County of Kaua`i, Department of Water proposes to develop waterline replacements in Wailua, Līhu`e and Kawaihau, Kaua`i in the State of Hawai`i (see Figure 1), located along Kuamo`o and Wailua Roads, `Ohana and Anolani Streets and Lehia Lane.

The project's purpose is to improve water distribution and fire protection within a portion of the Wailua-Kapa`a service area (see Figures 2 and 3), more specifically for the properties identified by tax map key as (zone 4) 3-9-06, (zone 4) 4-1-02, (zone 4) 4-1-03 and (zone 4) 4-1-04 (see Figures 4 and 5). The project is bordered by State and private properties in the Wailua Rice and Kula Lots and the Wailua House Lots, 2nd series. Existing land uses within the immediate area of the project area include a mix of uses comprised of residences, commercial uses, resorts and various types of public facilities including the Wailua River and Lydgate State Park.

The primary access to the project is Kūhi`ō Highway. The Kuamo`o Road section of the project starts off of Kūhi`ō Highway and extends just past `Ohana Street. The Wailua Road, `Ohana and Anolani Streets and Lehia Lane sections of the project cover approximately the entire length of the roadway. Wailua Road and `Ohana Street are located off of Kuamo`o Road, Anolani Street is located off of `Ohana Street and Lehia Lane is located off of Leho Drive.

As shown in Figure 6 there are existing water lines along Kuamo`o and Wailua Roads, `Ohana and Anolani Streets and Lehia Lane. As part of this waterline replacement project, existing water lines located within the State Right-of-Way will be removed while water lines located within the County Right-of-Way will be abandoned in place.

Kuamo`o and Wailua Roads, `Ohana and Anolani Streets and Lehia Lane are all paved public roadways. There are no existing provisions for fire protection along the sections of Kuamo`o and Wailua Roads and Anolani Streets within the project area.

The proposed project calls for installation of 1,215 linear feet of 8” ductile iron waterline along Kuamo`o Road, 432 linear feet of 6” ductile iron waterline along Wailua Road, 474 linear feet of 4” ductile iron waterline along `Ohana Street, 328 linear feet of 4” ductile iron waterline along Anolani Street and 225 linear feet of 6” ductile iron waterline along Lehia Lane. In conjunction with the proposed waterlines, fire hydrants and individual water meters will be provided at the respective lot frontages.

The total estimated development cost is approximately \$1,150,325. Funding will be by the Department of Water. Construction is projected to start in the Winter of 2011 and should be completed in Winter of 2012.

SECTION II

DESCRIPTION OF THE AFFECTED ENVIRONMENT AND POTENTIAL ENVIRONMENT IMPACTS

A. USES

Existing Conditions: Kuamo`o Road is a paved, two-lane State roadway that forms T-intersection with Kūhi`ō Highway. Wailua Road and `Ohana Street are both paved, two-lane, dead end County roadways that each form a T-intersection with Kuamo`o Road. Anolani Street is a paved, two-lane, dead end County roadway that forms a T-intersection with `Ohana Street. Lehia Lane is a paved, two-lane, dead end private roadway that forms a T-intersection with Leho Drive. Within the project area, there are 13 parcels and 5 existing water meters along Kuamo`o Road, 11 parcels and 6 existing water meters along Wailua Road, 11 parcels and 10 existing water meters along `Ohana Street, 9 parcels and 8 existing water meters along Anolani Street and 2 parcels and 1 existing water meter along Lehia Lane. The connections to the water meters are through public water lines, see Figures 7 to 13 for existing water line and water meter locations.

Proposed Actions: See Section I, Description of the proposed project and Figures 7 to 13.

Potential Impacts and Mitigative Measures: Replacement of waterline requires excavating along the roadways.

B. CLIMATE

Existing Conditions: Annual rainfall amounts to 39.57 inches. More than half of it occurs from October through March. Temperature averages 75 degrees Fahrenheit.

Potential Impacts and Mitigative Measures: The project will not affect macro or micro weather conditions.

C. TOPOGRAPHY AND SOILS

Existing Conditions: Ground elevation from a high 12 feet to a low of 0 feet above mean sea level for the Kuamo`o and Wailua Roads, `Ohana and Anolani Streets section of the project and from a high of 100 feet to a low of 98 feet above mean sea level for the Lehia Lane section. Cross slope is minimal. Permeability is moderate. Runoff is slow and the erosion hazard is no more than slight.

Potential Impacts and Mitigative Measures: Impacts occurring on the physical terrain from development of the project site are expected to be minimal. Since the site is relatively flat, minimum grading will be required. To minimize soil erosion during the construction process, erosion control measures will be designed and implemented in accordance with applicable governmental regulations.

D. SURFACE WATER AND DRAINAGE

Existing Conditions: Lehia Lane is not in an identified flood area and is designated as “Zone X” while Kuamo`o and Wailua Roads, `Ohana and Anolani Streets are within the floodway area designated as “Zone AE” on Kaua`i County’s Flood Insurance Rate Map dated November 26, 2010.

Zone X is defined as “Areas determined to be outside the 0.2% annual chance flood plain.” For Floodway areas in Zone AE, the floodways is defined as “the channel is a stream plus any adjacent floodplain areas that must be kept free of encroachments so that the 1% annual chance flood can be carried without substantial increases in flood heights”. See Figure 14 for Flood Insurance Rate map.

Proposed Actions: There will be no action that will affect the base flood elevation.

Potential Impacts and Mitigative Measures: No direct impacts on drainage should occur.

E. FLORA AND FAUNA

Existing Conditions: The project site is an existing roadway devoid of any flora. There are no rare, threatened or endangered vertebrate animal species known to exist on the project site.

Proposed Actions: Trenching and backfilling along an existing roadway to install a pipeline.

Potential Impacts: Adverse impacts are not anticipated. The proposed project is not expected to have a significant impact on flora as the site consists of an existing roadway.

F. HISTORIC SITES

Existing Conditions: The subject site was previously excavated and a roadway constructed.

Proposed Action: Re-excavation of portion of roadway to install a pipeline.

Potential Impacts: An Archeological Inventory Survey (AIS) of the project site was conducted and two historic properties were identified: the Wailua Drainage Canal culvert (State Site No. 50-30-08-2151) and the Wailua Coconut Grove Drainage Ditch culvert and water channel (State Site No. 50-30-2150). The survey results confirmed that neither of the sites will be compromised in terms of destruction and all features will retain their present integrity. Additionally, archeological monitoring will be provided during all ground altering activities associated with this project as recommended in the AIS.

Should subsurface features or qualified burials be unearthed, work in the immediate area shall cease and professional archaeologists summoned to investigate the find. Applicant also will notify the County of Kaua'i Planning Department and the State Historic Preservation Officer. Disinterment of qualified gravesites shall comply with Chapter 6E H.R.S.

G. LAND USE CONTROLS

Existing Conditions: The property is classified as Urban and Conservation by the State Land Use Commission, and is in the County Zoning Districts of Open and R-4 (See Figure 15). The proposed project is less than fifteen (15) acres and thus is not required to apply to the Land Use Commission for land use change.

Proposed Action: The proposed use of the property will be consistent with the conditions of the surrounding area.

Potential Impacts: The proposed use should not conflict with the zoning of nearby properties.

H. AIR QUALITY

Existing Conditions: Occasional dust is generated by local traffic.

Potential Impacts and Mitigative Measures: Ambient air quality may be affected by fugitive dust raised during site preparation activities and by exhaust fumes from internal combustion engines. Fugitive dust is an inevitable consequence of soil handling/movement but can be controlled by water sprinkling or application of dust suppressants.

Combustion discharges from construction equipment and vehicles are not anticipated to significantly alter ambient air quality and can be minimized by proper operation and maintenance of all petroleum-fueled equipment. In addition, the prevailing winds can be expected to dilute and disperse exhaust emissions away from existing homes. All activities shall comply with Air Pollution Control Regulations (Chapter 43) of the State Department of Health and all applicable County ordinances. At completion of the project, air quality for the existing residential community will revert to pre-construction levels.

I. NOISE

Existing Conditions: The property is currently being impacted by noise mainly from local traffic.

Proposed Actions: Noise levels are expected to increase once construction starts on the property. Maximum sound level would fall in the 85-96 dB(A) range with

the latter generated by earth moving and pneumatic impact equipment. Noise should be most pronounced during site work followed by reductions in frequency and duration during actual construction and post construction phases.

Potential Impacts and Mitigative Measures: The project abuts an existing residential development and it is possible that residents may be disturbed by construction noises. Although noise cannot be eliminated entirely and may be thought of as a short-term deleterious consequence, the Contractor will be required to have his equipment equipped with mufflers. The hours of operation will also be regulated.

In the long run, it is anticipated that noises emanating from the completed project would be similar to that of the adjoining residential subdivision.

J. HOUSING

Potential Impacts and Mitigative Measures: When completed, the proposed project will allow the abutting landowners to have adequate water facilities and fire protection.

K. PUBLIC UTILITIES AND SERVICES

1. Access:

Existing Conditions: Access to the project sites will be from Kūhi`ō Highway and Leho Drive. Kūhi`ō Highway is a State Right of Way with a paved surface. Leho Drive is a County Right of way also with a paved surface. There will be temporary inconvenience due to roadway excavation while installing the pipeline. This project will not have a

permanent effect on the travelway access.

Additionally, the State Department of Transportation - Highways Division has an independent project referred to as “Kūhi`ō Highway Short-Term Improvements, Kuamo`o Road to Temporary Bypass Road, Federal Aid Project No. NH-056-1(50)” which includes extending the existing right-turn storage lane along Kuamo`o Road from its intersection with Kūhi`ō Highway. Ideally, the waterline project would be completed prior to the highway surface improvements.

2. Water:

Existing Conditions: The Wailua-Kapa`a water system is the largest system on the island. Some of the water mains in this service area are quite old and/or undersized and pipeline replacements are necessary in order to provide adequate delivery

Potential Impacts and Mitigative Measures: The proposed waterline replacements will improve the water distribution and allow the Department of Water to keep up with consumer demand.

3. Wastewater:

Existing Conditions: The Wailua Wastewater Treatment Facility located on Leho Drive currently serves the Wailua area. All wastewater generated in the area is collected via gravity lines and sewage pump stations

Proposed Actions: No service improvements are planned at this time.

4. Solid Waste:

Existing Conditions: There is only one County sanitary landfill located in Kekaha, and four refuse transfer stations, the closest transfer station is the Kapa'a Transfer Station. Residential refuse collection services are available at the residential homes immediately adjacent to Kuamo'o and Wailua Roads and 'Ohana and Anolani Streets. A typical refuse crew consists of one truck driver and two refuse collectors. Collected refuse is delivered to the Kekaha landfill for disposal.

Potential Impacts and Mitigative Measures: No changes in existing service are planned for the proposed project.

5. Fire Protection:

Existing Conditions: Fire protection service for the Wailua area is provided by the Kapa'a Fire Station which is one of seven County fire stations. Four (4) men are assigned to the station with three (3) on duty at all times with major firefighting equipment.

The Fire Department's Fire/Rescue/HazMat/Medical Response Operations program provides fire protection and suppression, rescue (ocean and land), hazmat and emergency medical services (basic life support).

Proposed Actions: New provisions for fire protection will be provided.

6. Police Protection:

Existing Conditions: The County has three Police Stations located in Waimea, Lihu'e and Hanalei. Police service in the Wailua area is provided

by the Kaua`i Police Department Headquarters in Lihu`e.

Proposed Actions: None

7. Public Schools:

Existing Conditions: Public schools servicing the Wailua area are Kapa`a Elementary School, Kapa`a Middle School and Kapa`a High School.

Proposed Action: None.

8. Utilities:

Existing Conditions: Electrical power and telephone services are available from overhead distribution lines along each road.

Proposed Actions: None.

9. VISUAL EFFECTS:

Existing Conditions: This project involves underground waterline extension. Therefore, there will be no permanent visual effect except for fire hydrants that will be visible only from the immediate vicinity due to lush vegetation on both sides of the roadway.

SECTION III

ALTERNATIVES TO THE PROPOSED ACTION

No Action Alternative

A no action alternative would prevent the adjacent landowners from receiving any Fire Protection, the substandard size of existing waterline restricts adequate supply of water to consumers. Age of waterline makes it susceptible to breakage leading to contamination, damage to roadway and loss of water. Additionally, any new water service connection would require excavation along the public roadway or through neighboring private property to install a private consumer piping.

SECTION IV

ASSESSMENT PROCESS AND DETERMINATION OF SIGNIFICANCE

Assessment Process

The scope of the project was discussed with the Applicant and representatives of the Department of Water. Information was collected from the State of Hawai'i departments, County of Kaua'i agencies and offices, and utility companies. Time was spent in the field evaluating the site and observing conditions in the surrounding area.

Based on information obtained from the above references, the Environmental Assessment was prepared.

Determination of Significance and Recommendation

Chapter 200 of Title 11, Administrative Rules of the Department of Health entitled "Environmental Impact Statement Rules" established criteria for evaluating whether and action may have a significant effect on the environment. The relationship of the proposed project to these criteria are discussed below.

1. *Involves an irrevocable commitment to loss or destruction of any natural or cultural resources.*

None is anticipated. Roadway will be restored to original condition.

2. *Curtails the range of beneficial uses of the environment.*

The temporary inconvenience during construction should be offset by the provision of water and fire protection.

Owing to the paucity of significant environment features and the existing zoning of the land the proposed development is considered an appropriate use.

3. *Conflicts with the State's long-term environmental policies of goals and guidelines are expressed in Chapter 344, Hawai'i Revised Statutes, and any revisions thereof and amendments thereto, court decisions or executive orders.*

The project enriches the well being of the area residents with no damage to the environment.

4. *Substantially affects the economic or social welfare of the community or State.*

The estimated construction cost (\$1,150,325) will not substantially affect the economy adversely while providing a public utility. The jobs created will temporarily boost the economy.

5. *Substantially affects public health.*

The proposed project will not substantially affect economic or sociological activities. It is an implementing action that provides a public utility for a number of residents and businesses along Kuamo`o and Wailua Roads, `Ohana and Anolani Streets and Leho Lane. It is believed that a comfortable home instills psychological and sociological values, which collectively contributes to neighborhood stability and the community at large.

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

The number of lots, population and demand for public services and facilities will not be increased due to this project.

7. *Involves a substantial degradation of environmental quality.*

Environmental quality will remain the same.

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

The proposed project does not involve a commitment for larger actions in the immediate area.

9. *Substantially affects a rare, threatened, or endangered species (plant and animal) or its habitat.*

The site is devoid of rare, threatened, or endangered species (plant and animal) or its habitat as it is along existing roadways.

10. *Detrimentially affects air or water quality or ambient noise levels.*

Although fugitive dust and noises created during construction cannot be completely eliminated, such conditions can be mitigated by measures identified in this Assessment.

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

The waterline project is not in any such zone nor will it affect any such area.

12. *Substantially affects scenic vistas and vine plants identified in County or State plans or studies.*

The project is along existing roadways and will not affect scenic vistas or vine plants.

13. *Requires substantial energy consumption.*

The only energy consumption will be for construction equipment. After construction, water flow through the pipelines will be by gravity.

Based on the above criteria, the proposed project should not result in significant adverse environmental impacts. Potential environmental impacts are sufficiently disclosed in this Environmental Assessment and therefore it is recommended that Environmental Impact Statement is not required.

SECTION V

NAMES OF GROUPS AND INDIVIDUALS AFFECTED

BY THE PROPOSED PROJECT

<u>Tax Map Key</u>	<u>Names and Addresses</u>
(4) 3-9-06: 16	Aloha Beach Resort Nomura CDO LLC. 5221 N. O'Connor Boulevard #600 Irving, TX 75039 State of Hawai`i
(4) 3-9-06: 20	Aloha Beach Resort Nomura CDO LLC. 5221 N. O'Connor Boulevard #600 Irving, TX 75039 State of Hawai`i
(4) 3-9-06: 25	State of Hawai`i
(4) 4-1-02: 03	State of Hawai`i
(4) 4-1-03: 04	Coco Palms Ventures LLC. 1919 West Street, Suite 100 Annapolis, MD 21401
(4) 4-1-03: 05	Coco Palms Ventures LLC. 1919 West Street, Suite 100 Annapolis, MD 21401
(4) 4-1-03: 11	Coco Palms Ventures LLC. 1919 West Street, Suite 100 Annapolis, MD 21401
(4) 4-1-03: 17	Coco Palms Ventures LLC. 1919 West Street, Suite 100 Annapolis, MD 21401

Tax Map Key

Names and Addresses

(4) 4-1-03: 40	Coco Palms Ventures LLC. 1919 West Street, Suite 100 Annapolis, MD 21401
(4) 4-1-04: 05	Smith's Motor Boat Services 174 Wailua Road Kapa`a, HI 96746 Charlotte S. Kauai Trust 1760 Mauna Ikena Road Kapa`a, HI 96746
(4) 4-1-04: 06	Smith's Motor Boat Services 174 Wailua Road Kapa`a, HI 96746 Charlotte S. Kauai Trust 1760 Mauna Ikena Road Kapa`a, HI 96746
(4) 4-1-04: 07	Thomas Joint Trust C/O Merrill Higham 455 Cervantes Road Portola Valley, CA 94025 Bernice Lamar Robert Lamar
(4) 4-1-04: 08	State of Hawai`i
(4) 4-1-04: 09	Peter F. Fisher Trust P.O. Box 24 Lihu`e , HI 96766 Elizabeth A. Fisher-Lavoie Trust
(4) 4-1-04: 10	State of Hawai`i

Tax Map Key

Names and Addresses

(4) 4-1-04: 11

Samuel L. Peters
169 Wailua Road
Kapa`a, HI 96746

James L. Youn

(4) 4-1-04: 13

Smith's Motor Boat Services Inc.
174 Wailua Road
Kapa`a, HI 96746

(4) 4-1-04: 14

Smith's Motor Boat Services
174 Wailua Road
Kapa`a, HI 96746

Charlotte S. Kauai Trust
1760 Mauna Ikena Road
Kapa`a, HI 96746

(4) 4-1-04: 15

Kozue Kimata Trust
P.O. Box 357
Eleele, HI 96705

(4) 4-1-04: 16

Kozue Kimata Trust
P.O. Box 357
Eleele, HI 96705

(4) 4-1-04: 19

Greg L. Allen, Jr.
161 Wailua Road
Kapa`a, HI 96746

Joanne B. Allen

(4) 4-1-04: 21

Smith's Motor Boat Services
174 Wailua Road
Kapa`a, HI 96746

State of Hawai`i

Tax Map Key

Names and Addresses

(4) 4-1-04: 22	State of Hawai`i
(4) 4-1-04: 24	State of Hawai`i
(4) 4-1-04: 25	Robin Fricke P.O. Box 664 Kōloa HI, 96756
(4) 4-1-04: 26	Henry N. Shibata Trust C/O Janis C. Shibata 10433 Larwin Avenue Chatsworth, CA 91311 Asako Shibata Trust 10433 Larwin Avenue Chatsworth, CA 91311
(4) 4-1-04: 27	Michael Laureta P.O. Box 3362 Līhu`e , HI 96766 Elizabeth L. Laureta
(4) 4-1-04: 28	Kenneth J. Terheggen 174 Ohana Place Kapa`a, HI 96746 Kathleen A. Schmidt
(4) 4-1-04: 29	Pattie Krebs Trust 60 Karol Lane Pleasant Hill, CA 94523
(4) 4-1-04: 30	Candace L. Mack 160 Ohana Street Kapa`a, HI 96746

Tax Map Key

Names and Addresses

(4) 4-1-04: 31	First Avenue Trust C/O Prager and Fenton LLP 2381 Rosecrans Avenue, Suite 350 El Segundo, CA 90245
(4) 4-1-04: 32	Elmer A. & Suzanne C. Maas Trust 13948 Camino Barco Saratoga, CA 95070
(4) 4-1-04: 33	Carrie S. Lavigne Trust 9 Auvergne Newport Beach, CA 92657
(4) 4-1-04: 34	Dennis N. Beckel 4446 Sunknoll Drive Loveland, CO 80538
(4) 4-1-04: 35	Marianne Ashby 299 N. Poverty Road Southbury, CT 06488
(4) 4-1-04: 36	Roger Netzer 4644 Anolani Street Kapa`a, HI 96746
(4) 4-1-04: 37	Leland E. Black, Jr. 14 8 th Ave. Brooklyn, NY 11217
(4) 4-1-04: 38	Kenneth Watanabe Trust C/O Lorraine Mizuno, Trustee P.O. Box 198 Clarksburg, CA 95612
(4) 4-1-04: 39	John E. Young P.O. Box 1388 Kapa`a, HI 96746

Kathleen A. Young

Tax Map Key

Names and Addresses

(4) 4-1-04: 40

John F. Hunchak
2065 Westney Road N. Ajax
Ontario L1T 4S7, Canada

Dianne L. Hunchak

(4) 4-1-04: 41

Laura A. Higa
5868 Haaheo Place
Kapa`a, HI 96746

Timothy Blume

(4) 4-1-04: 42

Jack B. Siart
7771 Seabreeze Drive
Huntington Beach, CA 92648

Kathy R. Siart

Names and addresses of affected groups and individuals were obtained from the County of Kaua'i Real Property Assessment and Treasury Divisions website (www.kauaipropertytax.com)

LETTER TO RESIDENTS WITH MAP

**Notice of Water Pipeline Replacement
Wailua Water System**

This is a courtesy notification of construction activity that will be occurring in your area.

As part of the Department of Water's Water Plan 2020, our contractor, Koga Engineering and Construction will be replacing approximately 2,250 linear feet of waterline and other waterline accessories including valves, fire hydrants, service laterals and connections in your area beginning February 1, 2011 with anticipated completion in December 2011.

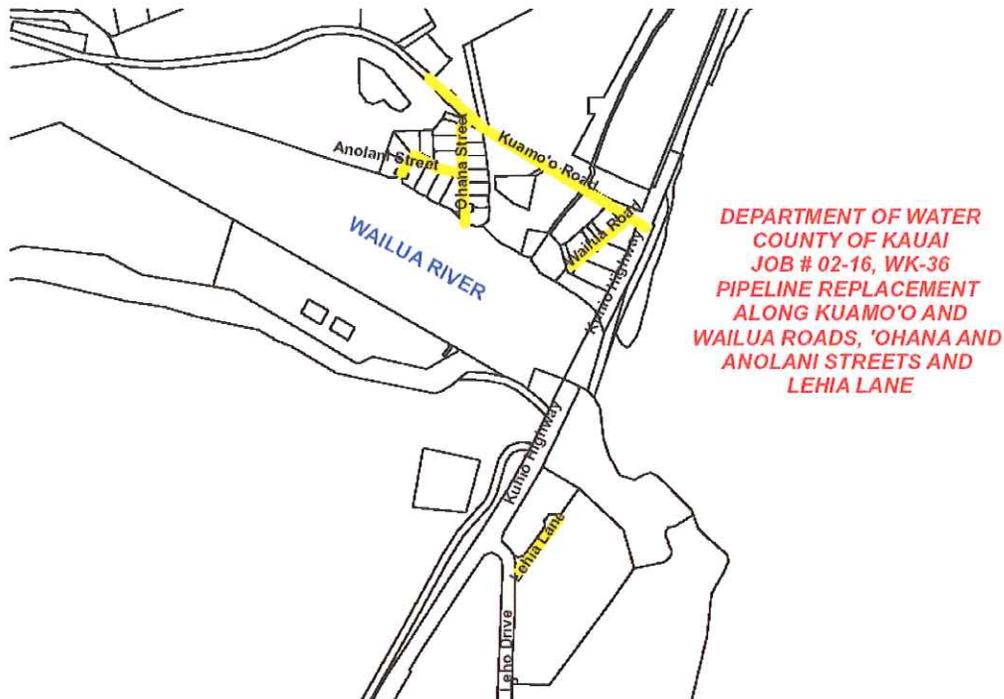
Customers along Wailua, Ohana, Anolani, portions of Kuamoo Roads and Lehia Lane will be affected. Please be aware of all construction equipment and vehicles that will be in the area for the duration of the project. A detailed map can be found on our website at www.kauaiwater.org.

We apologize in advance for any inconvenience and extend our appreciation for your patience and cooperation.

General questions - call Faith Shiramizu at 808-245-5455.

Project construction concerns – call Dustin Moises at 808-245-5459.

Sincerely,
County of Kauai, Department of Water



DRAFT

**ENVIRONMENTAL ASSESSMENT
AND
NEGATIVE DECLARATION**

**WATERLINE REPLACEMENT ALONG KUAMO`O AND
WAILUA ROADS, `OHANA AND ANOLANI STREETS AND
LEHIA LANE**

WAILUA, LIHU`E AND KAWAIHAU, KAUA`I, HAWAII

**Submitted in Accordance with
Requirements for Chapter 343, HRS and
Chapter 200 of Title II, Administrative Rules
Department of Health, State of Hawai`i**

Prepared for the

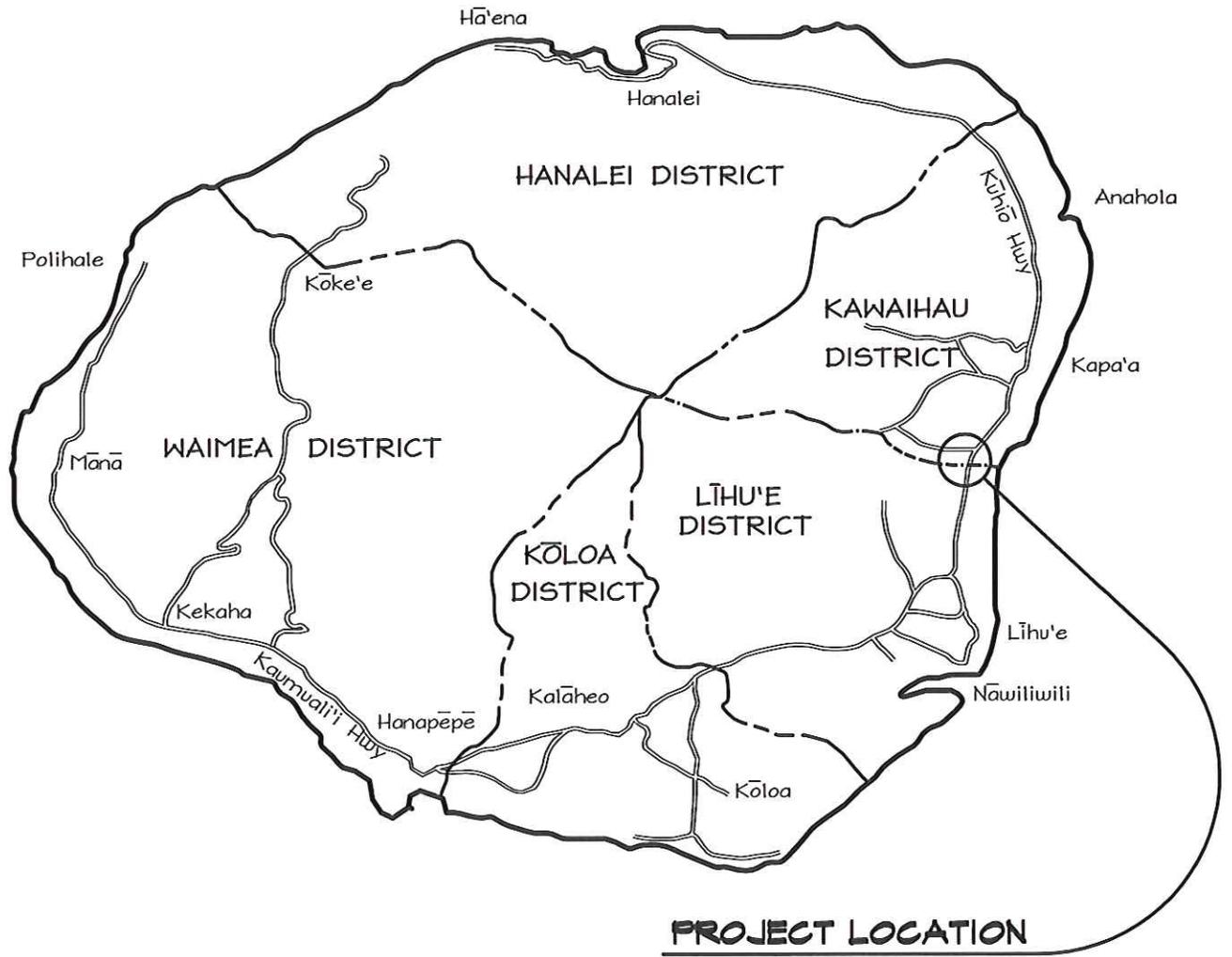
**Department of Water
County of Kaua`i**

By

Esaki Surveying and Mapping, Inc.

March 2011

TRUE NORTH
Not to Scale



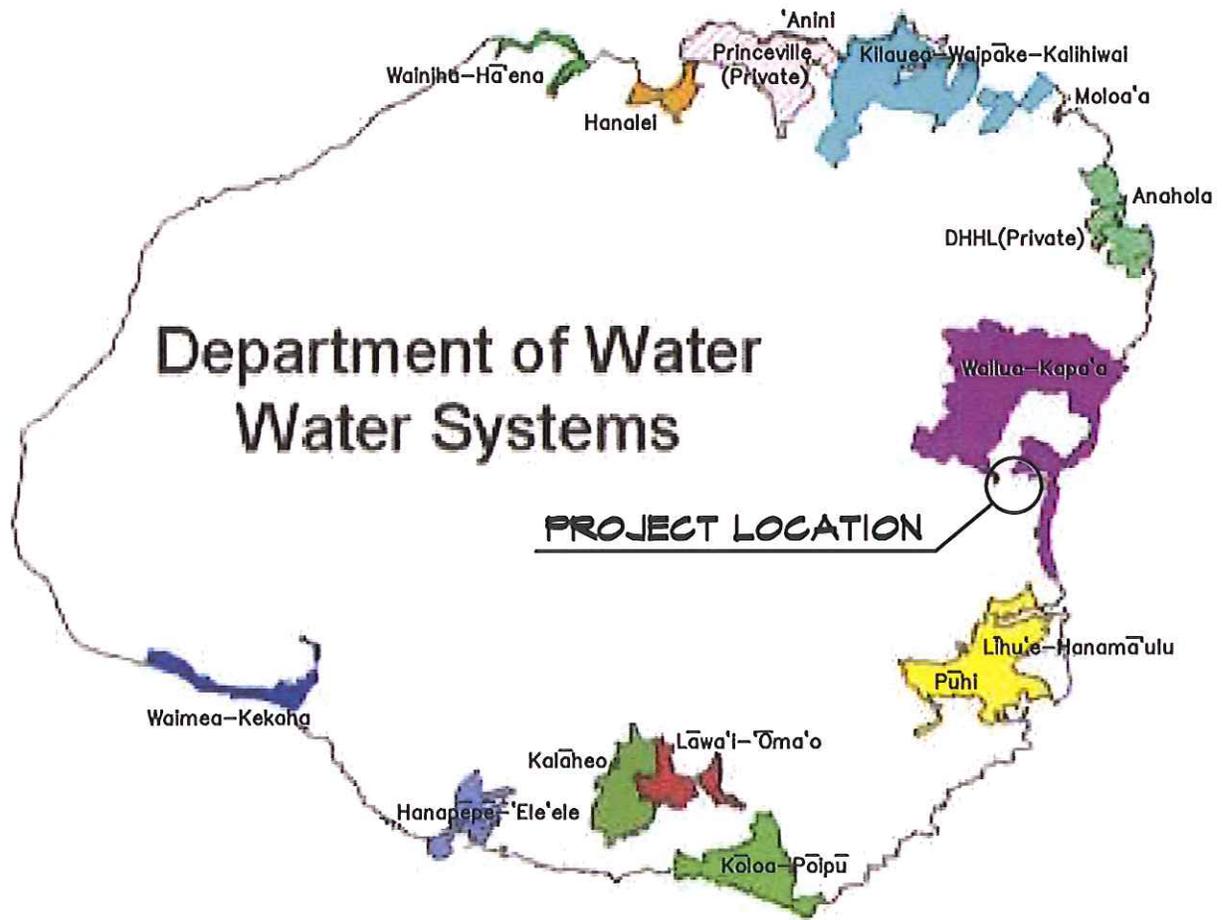
PROJECT LOCATION

ESAKI SURVEYING AND MAPPING, INC.

Engineers, Land Surveyors & Planners
1610 Haleukana Street
Līhu'e, Kaua'i, Hawai'i

**FIGURE 1
Island of Kaua'i**

PIPELINE REPLACEMENT ALONG KUAMO'O
AND WAILUA ROADS, 'OHANA AND ANOLANI
STREETS AND LEHIA LANE
JOB NO. 02-16, WK-36
Wailua, Līhu'e and Kawaihau, Kaua'i, Hawai'i



Source: Water Plan 2020

ESAKI SURVEYING AND MAPPING, INC.

Engineers, Land Surveyors & Planners
1610 Haleukana Street
Līhu'e, Kaua'i, Hawai'i

FIGURE 2

DOW Service Areas Map

PIPELINE REPLACEMENT ALONG KUAMO'O
AND WAILUA ROADS, 'OHANA AND ANOLANI
STREETS AND LEHIA LANE
JOB NO. 02-16, WK-36
Wailua, Līhu'e and Kawaihau, Kaua'i, Hawai'i

Service Area	Description
Waimea-Kekaha	The service area is comprised of two relatively compact small towns. Waimea is the civic center of the West Side, home to the high school, hospital, and other community facilities as well as a variety of restaurants and retail stores. Kekaha includes a residential community that supports diversified agricultural and a small industrial area that was occupied by the former Kekaha Sugar Plantation. The area also supports the nearby Pacific Missile Range Facility and west side State parks.
Hanapepe-Eleele	The service area includes Kauai's second commercial harbor, Port Allen, the island's major electrical power generating station, and other industrial uses. Across the highway are Hanapepe Town and the residential community of Hanapepe Heights. Eleele has a small business area and residential communities.
Kalaheo	Kalaheo has small-town commercial uses concentrated along the highway and along Papalina Road.
Lawai-Omao	The west side has three small-town/rural service areas: Lawai-Omao, Kalaheo, and Waimea-Kekaha. The Kalaheo and Lawai-Omao service areas consist primarily of agricultural homestead lands that have been subdivided and developed at various densities of residential use.
Koloa-Poipu	The service area consists of a concentration of resorts along the coast, with residential communities clustered near the coast and around Koloa Town. Poipu is Kauai's fastest-growing resort destination, and the service area includes several projects yet to be constructed.
Puhi-Lihue-Hanamaulu	The most diverse customer base. The area includes Kauai's major airport and commercial harbor, the largest concentration of industrial uses, Wilcox Hospital, hotels, a broad range of government and business uses, and residential neighborhoods.
Wailua-Kapaa	The service area has hotel and business uses clustered along the coastal highway. Schools, hospitals, and urban residential neighborhoods are located along the highway, as well as along two major roads that extend inland towards the mountains at the north and south ends of the Wailua-Kapaa basin: Kuamoo Road and Kawaihau Road. The central part of the basin is comprised of old agricultural homesteads that are gradually transitioning to residential use.
Anahola	In Anahola, the major landowner is the Department of Hawaiian Homelands (DHHL), which develops residential lots and agricultural homesteads for lease to native Hawaiians. The Anahola service area also includes privately owned residential and agricultural lots in and around Anahola Valley. Portions of the water system are owned by either the DOW or DHHL. DOW operates the system in partnership with DHHL.
Moloaa	These east side rural communities include Moloaa and Anahola. Moloaa is the DOW's smallest service area consisting of two small clusters of residences. Water is purchased from a state well that is currently operated by a private landowner in the area. Water from this source also supplies the agricultural activities in the area.
Kilauea-Waipake-Kalihiwai	The service area is comprised of Kilauea Town and a number of non-contiguous agricultural subdivisions that extend towards the mountains or the coast on either side of the highway. While Kilauea Town is a compact node of urban-density residential use and neighborhood businesses, the largest part of the service area consists primarily of low-density residential use, mixed with small farms.
Anini	The service area consists of a narrow strip of beach residences. The water is purchased from Princeville Utilities
Hanalei	The service area consists of residences and small-town business uses. Narrow roadways and one-lane bridges limit development in these areas.
Wainiha-Haena	The system serves residences along the coast and in Wainiha Valley.

Source: Water Plan 2020

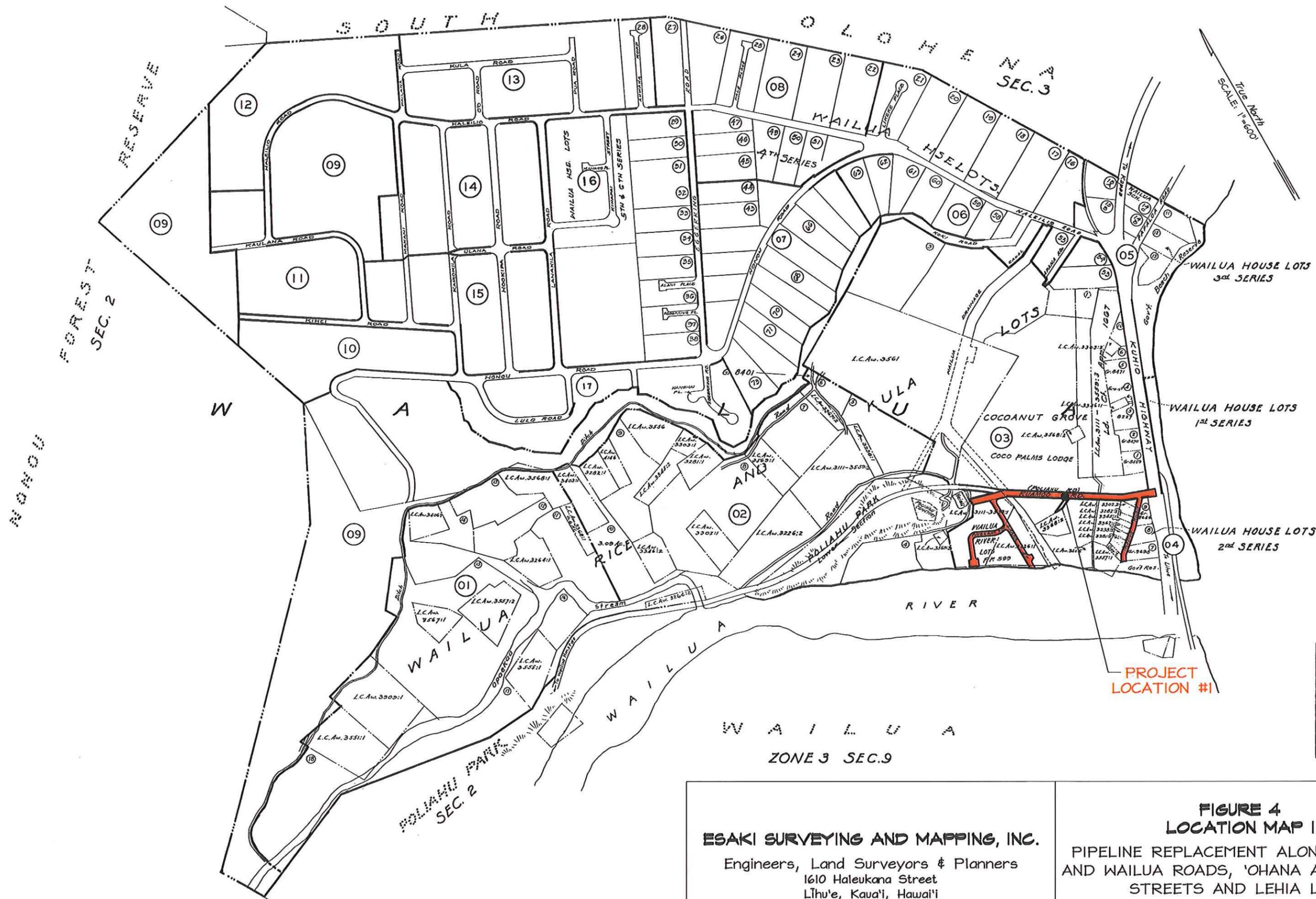
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Līhu'e, Kava'i, Hawai'i

FIGURE 3

DOW Service Areas Table

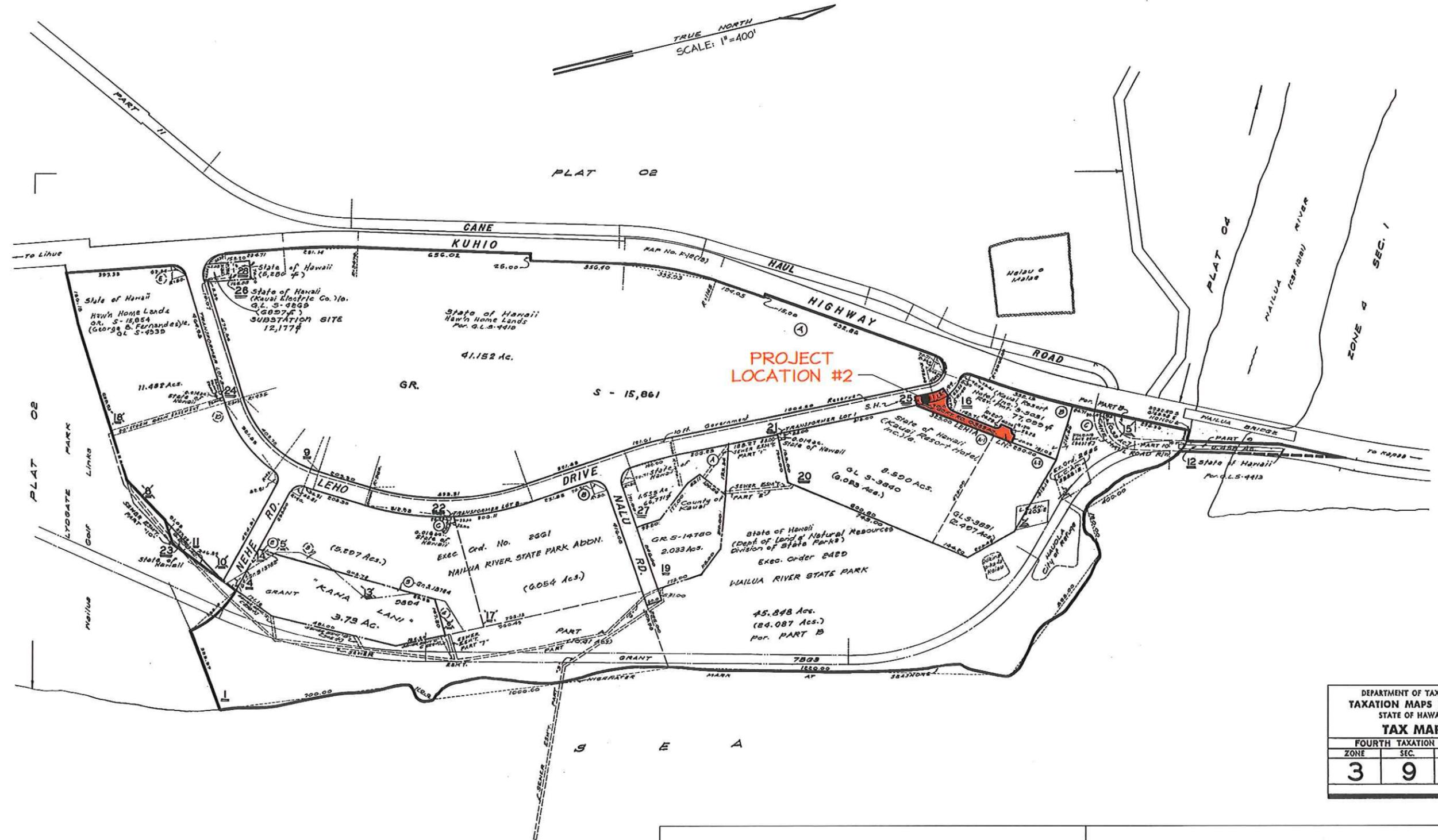
PIPELINE REPLACEMENT ALONG KUAMO'O
AND WAILUA ROADS, 'OHANA AND ANOLANI
STREETS AND LEHIA LANE
JOB NO. 02-16, WK-36
Wailua, Līhu'e and Kawaihau, Kava'i, Hawai'i



TAXATION MAPS BUREAU	
TERRITORY OF HAWAII	
TAX MAP	
FOURTH DIVISION	
ZONE	SEC.
4	1
CONTAINING	PLATS

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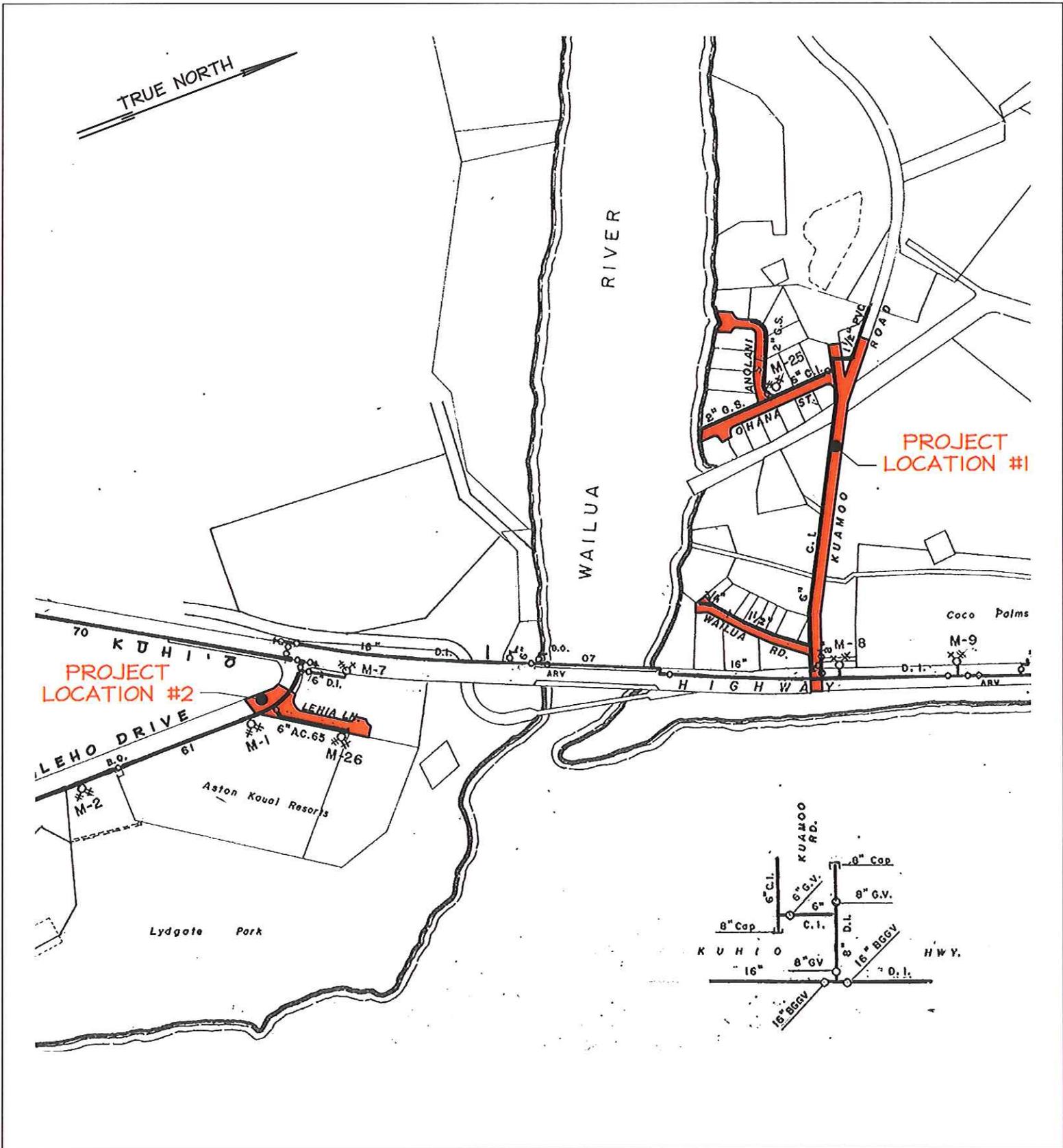
**FIGURE 4
 LOCATION MAP I**
 PIPELINE REPLACEMENT ALONG KUAMO'O
 AND WAILUA ROADS, 'OHANA AND ANOLANI
 STREETS AND LEHIA LANE
 JOB NO. 02-16, WK-36
 Wailua, Līhu'e and Kawaihau, Kaua'i, Hawai'i



DEPARTMENT OF TAXATION		
TAXATION MAPS BUREAU		
STATE OF HAWAII		
TAX MAP		
FOURTH TAXATION DIVISION		
ZONE	SEC.	PLAT
3	9	06

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 Engineers, Land Surveyors & Planners
 1610 Haleukana Street
 Lihue, Kauai, Hawaii

FIGURE 5
LOCATION MAP 2
 PIPELINE REPLACEMENT ALONG KUAMO'O
 AND WAILUA ROADS, 'OHANA AND ANOLANI
 STREETS AND LEHIA LANE
 JOB NO. 02-16, WK-36
 Wailua, Lihue and Kawaihau, Kauai, Hawaii

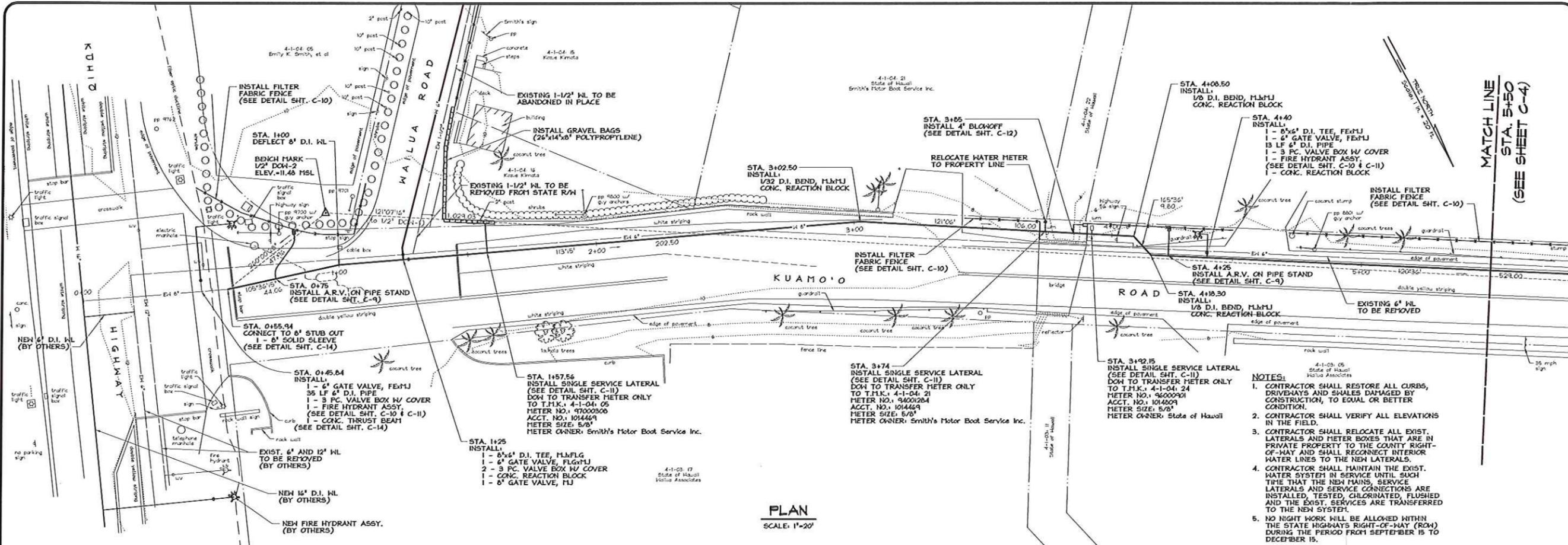


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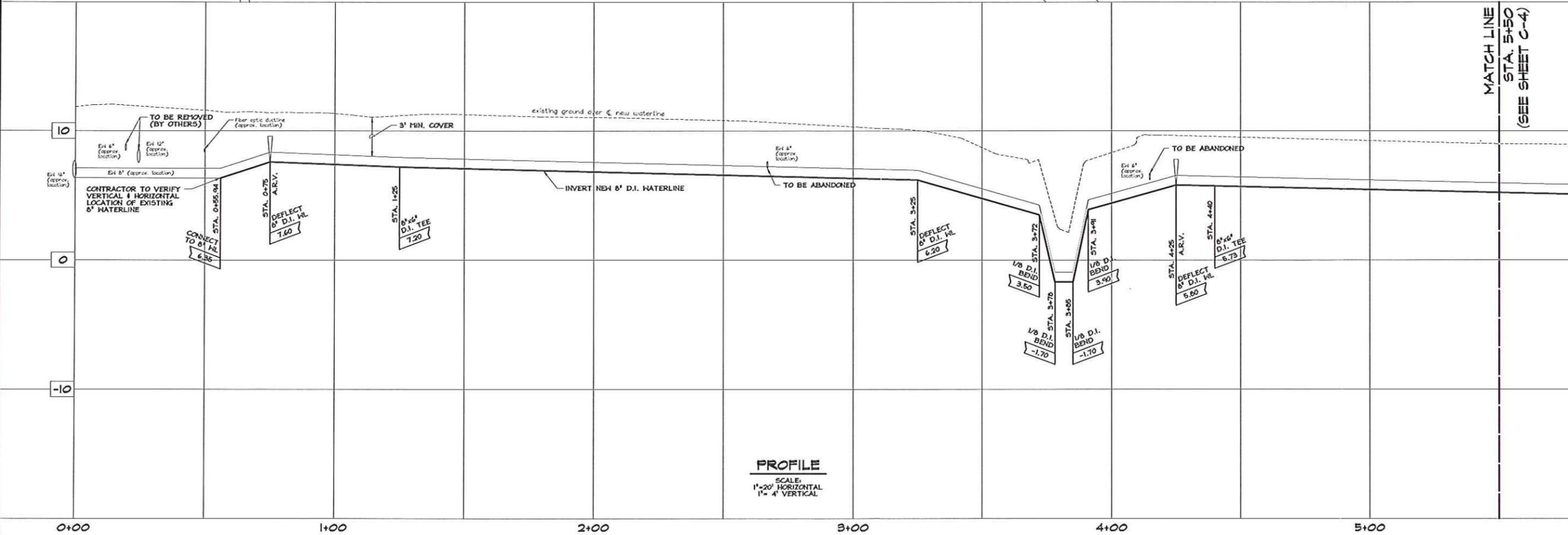
Engineers, Land Surveyors & Planners
 1610 Haleukana Street
 Līhu'e, Kaua'i, Hawai'i

FIGURE 6
Water Facility Map

PIPELINE REPLACEMENT ALONG KUAMO'O
 AND WAILUA ROADS, 'OHANA AND ANOLANI
 STREETS AND LEHIA LANE
 JOB NO. 02-16, WK-36
 Wailua, Līhu'e and Kawaihau, Kaua'i, Hawai'i



PLAN
SCALE: 1"=20'



PROFILE
SCALE:
1"=20' HORIZONTAL
1"=4' VERTICAL

REVISION	DATE	DESCRIPTION	BY	APPROVED

REVISIONS



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EXPIRES: APRIL 30, 2012

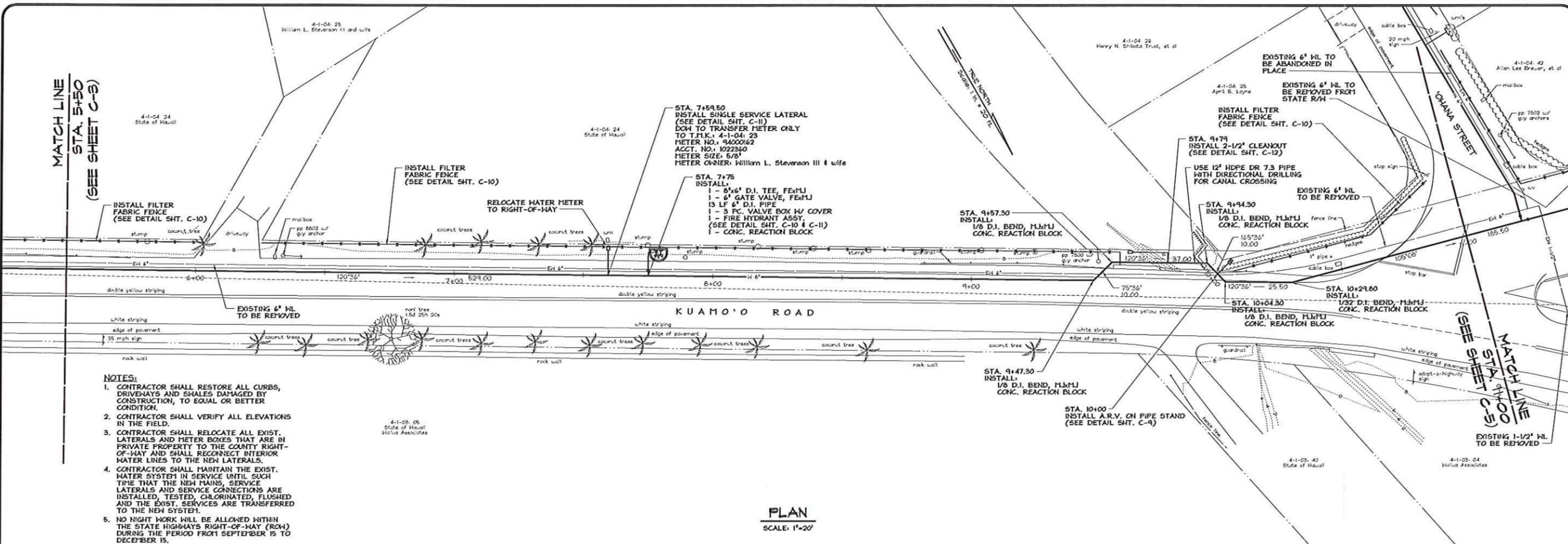
PROJECT:
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REPLACEMENT ALONG KUAMO'O AND
WAILUA ROADS, 'OHANA AND ANOLANI
STREETS AND LEHIA LANE**
Tax Map Key: (4) 3-9-06, (4) 4-1-02,
(4) 4-1-03 and (4) 4-1-04
Wailua, Lhu'e and Kawaihou, Kona, Hawaii
CLIENT:
DEPARTMENT OF WATER

**PLAN AND PROFILE
KUAMO'O ROAD
STA 0+00 TO 5+50**

APPROVED
COUNTY ENGINEER, DEPT. OF PUBLIC WORKS,
COUNTY OF KAUAI (FOR WORK WITHIN COUNTY R/W) DATE
MANAGER & CHIEF ENGINEER, DEPT. OF WATER,
COUNTY OF KAUAI DATE

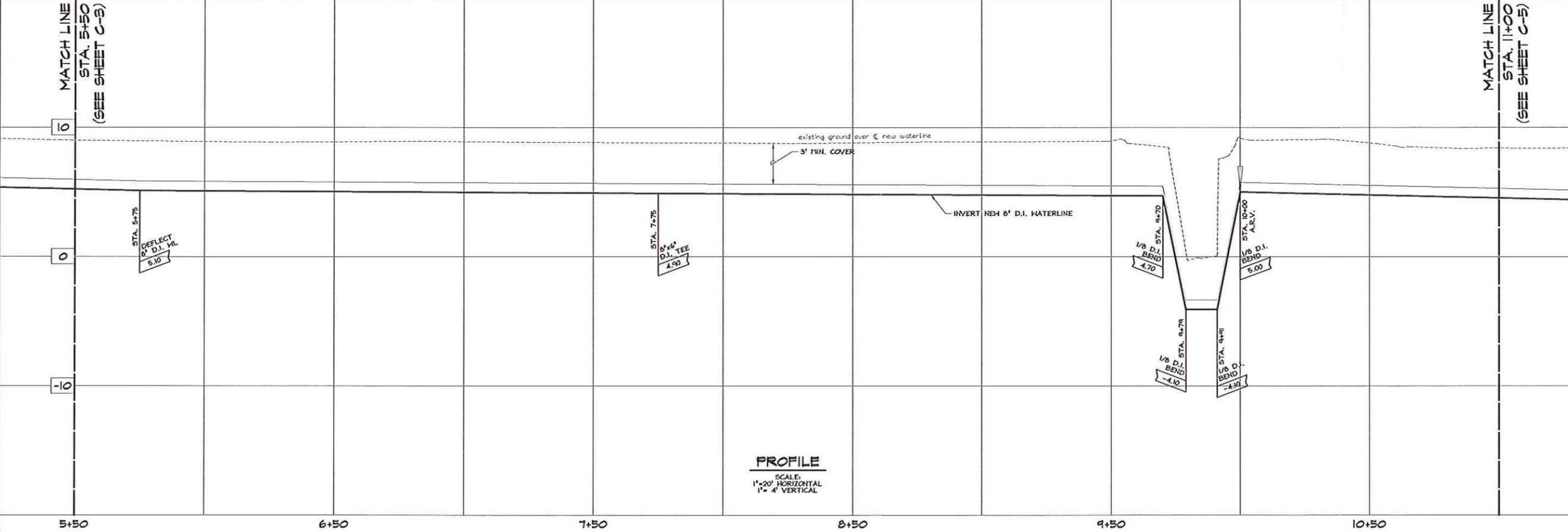
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DRAWN BY: *BF* **C-3**
DATE: 6/14/10 4 OF 17 SHEETS

Project No.: 03-05
Drawing Title: 03-05C.dwg



PLAN
SCALE: 1"=20'

- NOTES:**
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 - NO NIGHT WORK WILL BE ALLOWED WITHIN THE STATE HIGHWAYS RIGHT-OF-WAY (ROW) DURING THE PERIOD FROM SEPTEMBER 15 TO DECEMBER 15.



PROFILE
SCALE: 1"=20' HORIZONTAL
1"=4' VERTICAL

REVISION	DATE	DESCRIPTION	BY	APPROVED

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PROJECT:
CONSTRUCTION PLANS FOR PIPELINE REPLACEMENT ALONG KUAMO'O AND WAILUA ROADS, 'OHANA AND ANOLANI STREETS AND LEHIA LANE
Tax Map Key: (4) 3-9-06, (4) 4-1-02, (4) 4-1-03 and (4) 4-1-04
Wai'ua, Lihua and Kawaihou, Kauai, Hawaii
CLIENT:
DEPARTMENT OF WATER

**PLAN AND PROFILE
KUAMO'O ROAD
STA 5+50 TO 11+00**

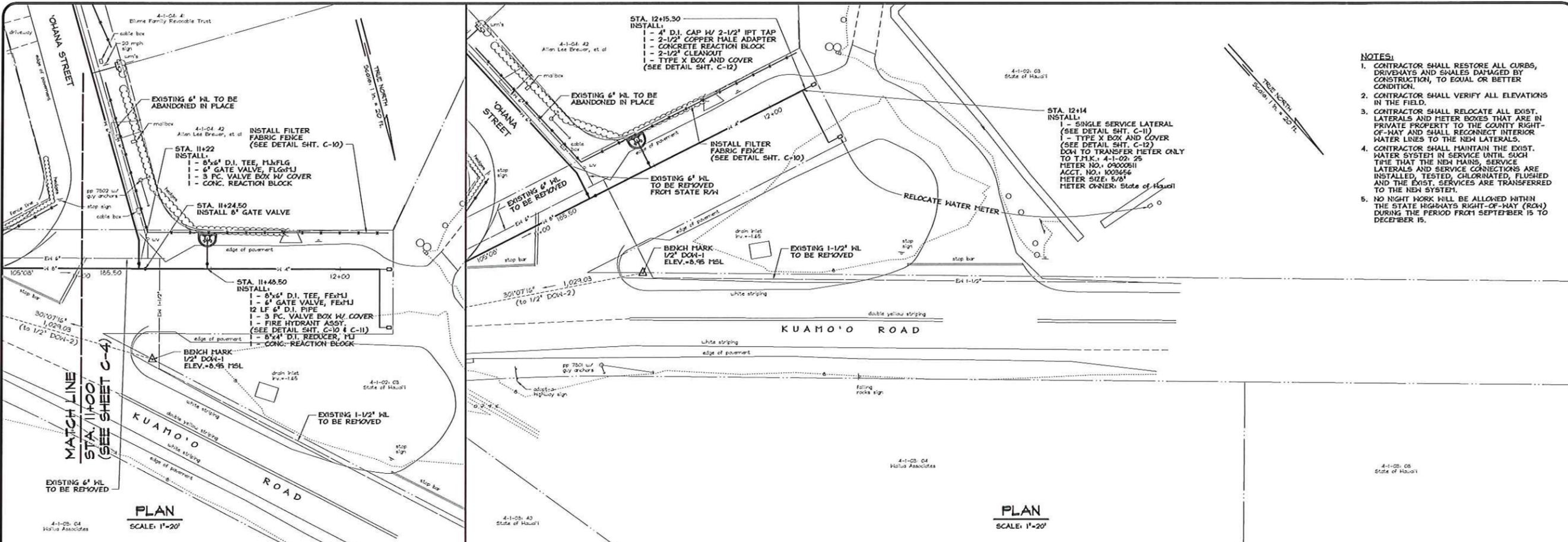
APPROVED:

COUNTY ENGINEER, DEPT. OF PUBLIC WORKS, COUNTY OF KAUAI (FOR WORK WITHIN COUNTY R/W) DATE

MANAGER & CHIEF ENGINEER, DEPT. OF WATER, COUNTY OF KAUAI DATE

DESIGNED BY: *BF* SHEET
DRAWN BY: *BF* **C-4**
DATE: 6/11/10 5 OF 17 SHEETS

Project No.: 02-16
Drawing File: 02-16-C-4.dwg



- NOTES:**
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ESAKI SURVEYING AND MAPPING, INC.

1510 Halekuna Street
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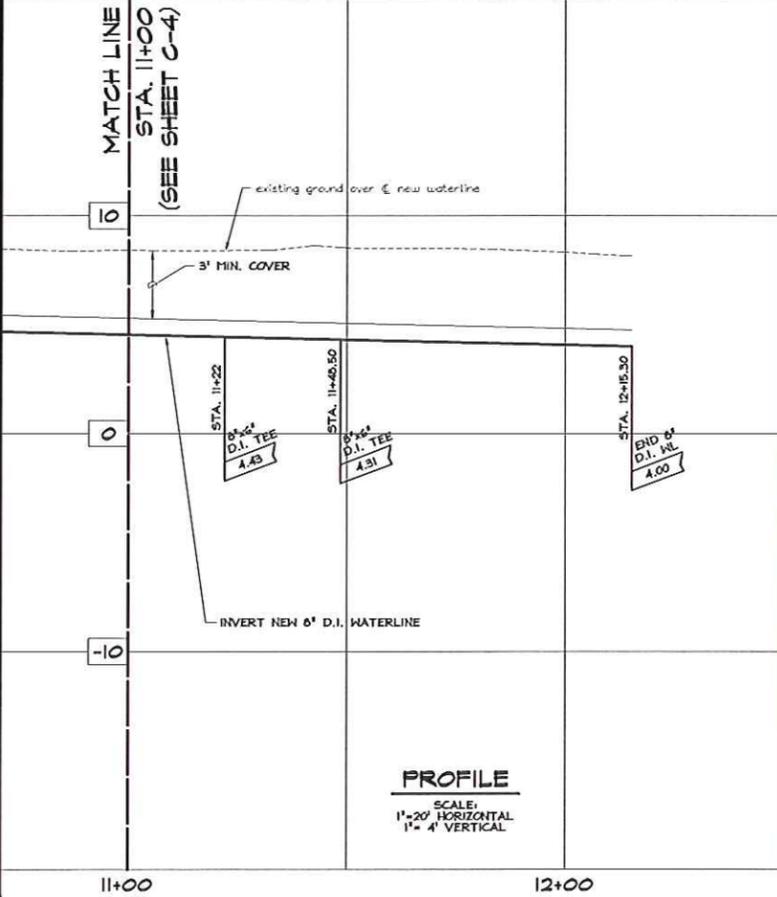
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PLAN AND PROFILE KUAMO'O ROAD

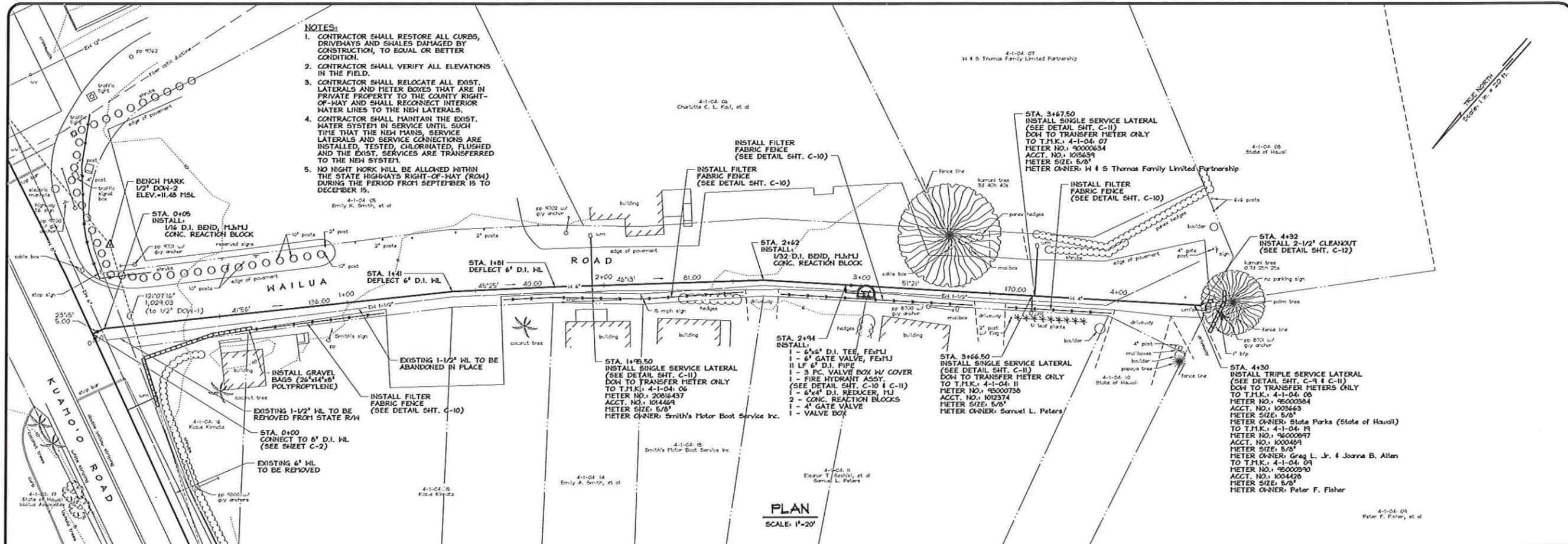
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MANAGER & CHIEF ENGINEER, DEPT. OF WATER, COUNTY OF KAUAI DATE

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DRAWN BY: *BS*
DATE: 6/11/10
SHEET: **C-5**
6 OF 17 SHEETS

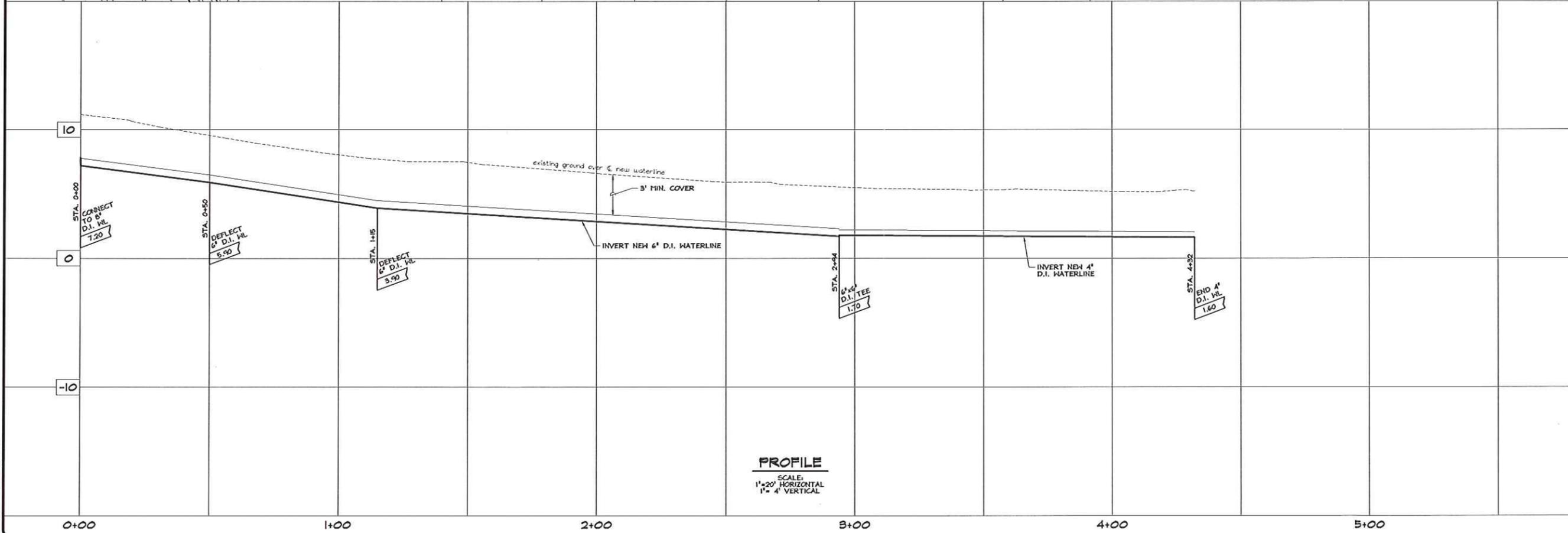


PROFILE
SCALE: 1" = 20' HORIZONTAL
1" = 4' VERTICAL

Project No.: 02-16
Drawing File: 02-16-C-5.dwg



PLAN
SCALE: 1"=20'



PROFILE
SCALE:
1"=20' HORIZONTAL
1"=4' VERTICAL

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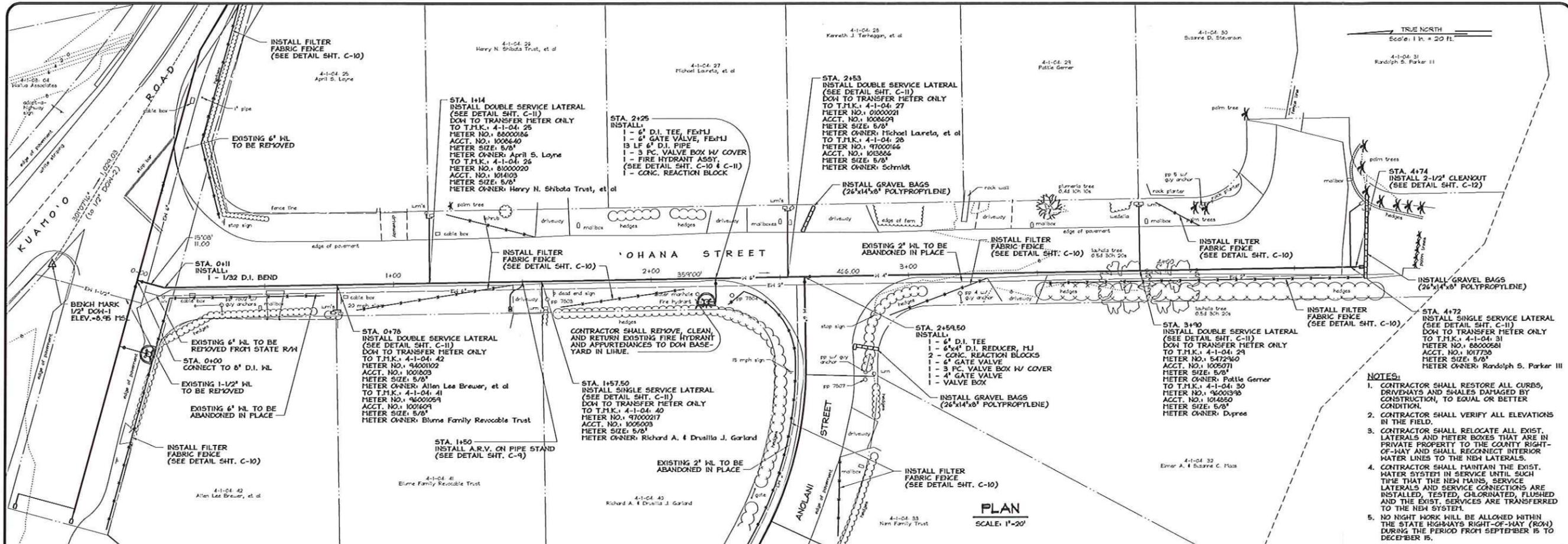
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Tax Map Key: (4) 3-9-06, (4) 4-1-02, (4) 4-1-03 and (4) 4-1-04
Wailua, Lihue and Kowaihou, Kauai, Hawaii
CLIENT:
DEPARTMENT OF WATER

PLAN AND PROFILE WAILUA ROAD

APPROVED:
COUNTY ENGINEER, DEPT. OF PUBLIC WORKS, COUNTY OF KAUAI (FOR WORK WITHIN COUNTY R/W) DATE
MANAGER & CHIEF ENGINEER, DEPT. OF WATER, COUNTY OF KAUAI DATE

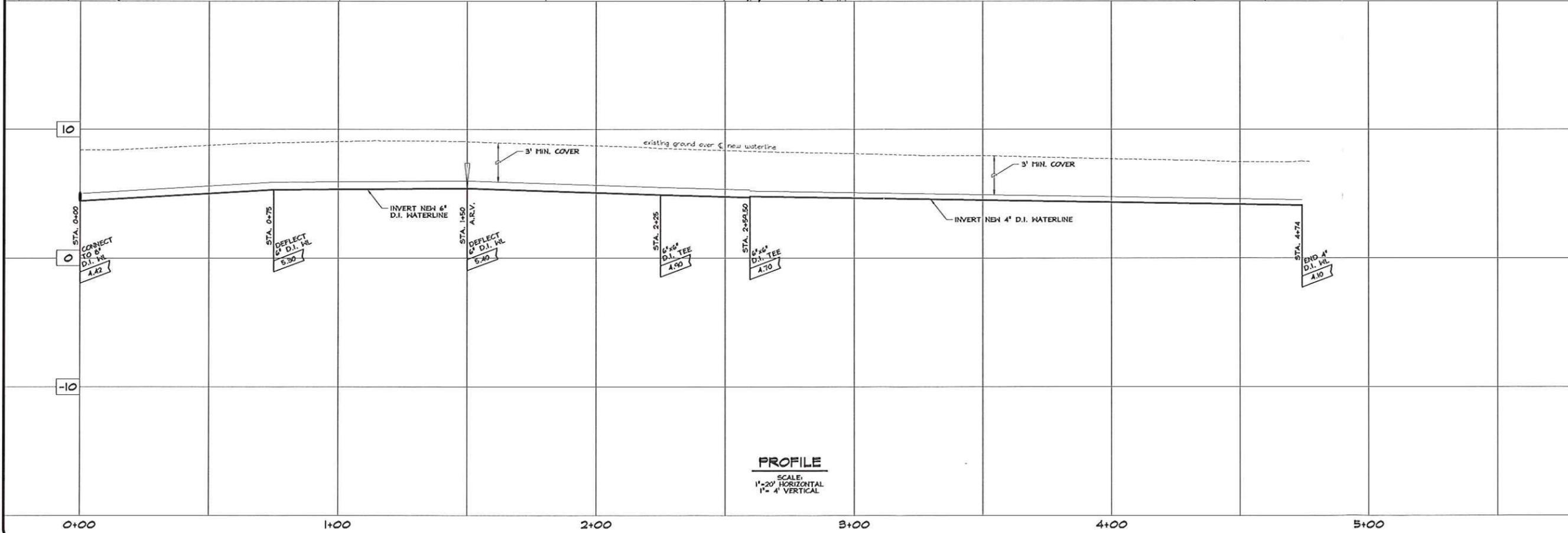
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DRAWN BY: *BJ* **C-6**
DATE: 6/11/10 7 OF 17 SHEETS

Project No.: 03-06
Drawing File: 03-06C.dwg



PLAN
SCALE: 1"=20'

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PROFILE
SCALE:
1"=20' HORIZONTAL
1"=4' VERTICAL

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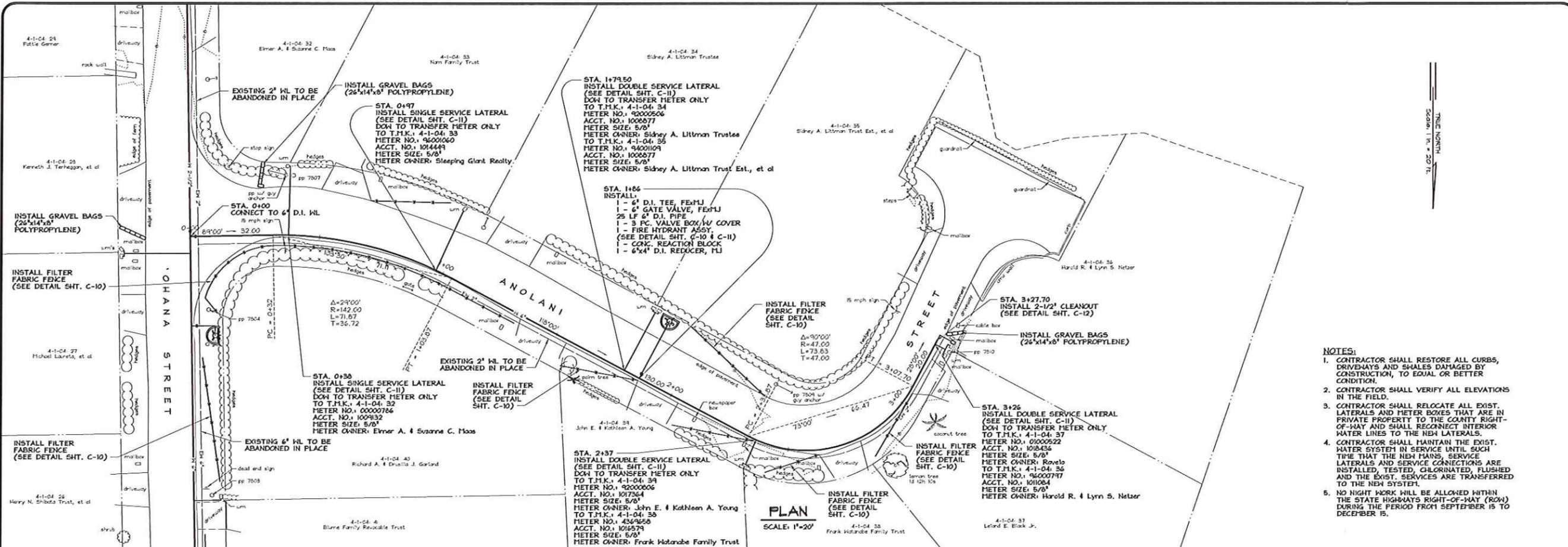
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Waioa, Lhu'e and Kawaihou, Kauai, Hawaii
CLIENT:
DEPARTMENT OF WATER

PLAN AND PROFILE 'OHANA STREET

APPROVED
COUNTY ENGINEER, DEPT. OF PUBLIC WORKS, COUNTY OF KAUAI (FOR WORK WITHIN COUNTY R/W) DATE
MANAGER & CHIEF ENGINEER, DEPT. OF WATER, COUNTY OF KAUAI DATE

DESIGNED BY: *BJ* SHEET
DRAWN BY: *BJ* **C-7**
DATE: 6/11/10 8 OF 17 SHEETS

Project No.: 03-06
Drawing File: 03-06C.dwg



PLAN
SCALE: 1"=20'

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Wailua, Lhu'e and Kowlohou, Kaula, Hawai'i
CLIENT:
DEPARTMENT OF WATER

PLAN AND PROFILE ANOLANI STREET

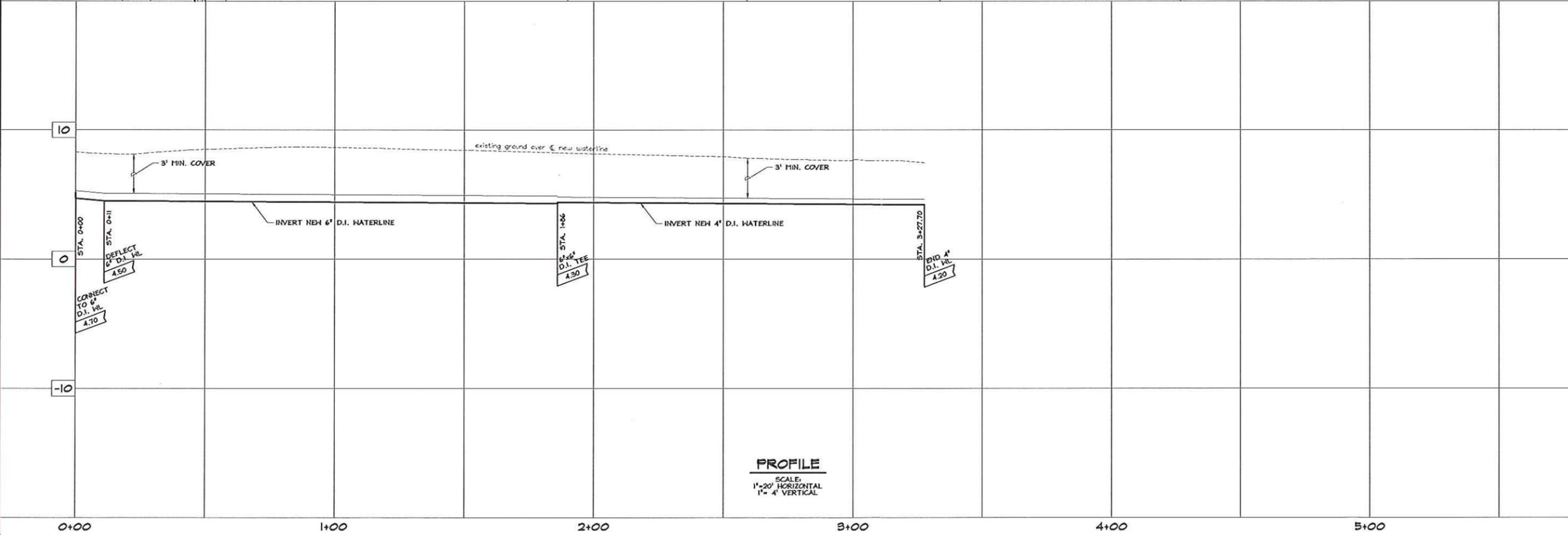
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COUNTY ENGINEER, DEPT. OF PUBLIC WORKS, COUNTY OF KAUAI (FOR WORK WITHIN COUNTY R/W) DATE

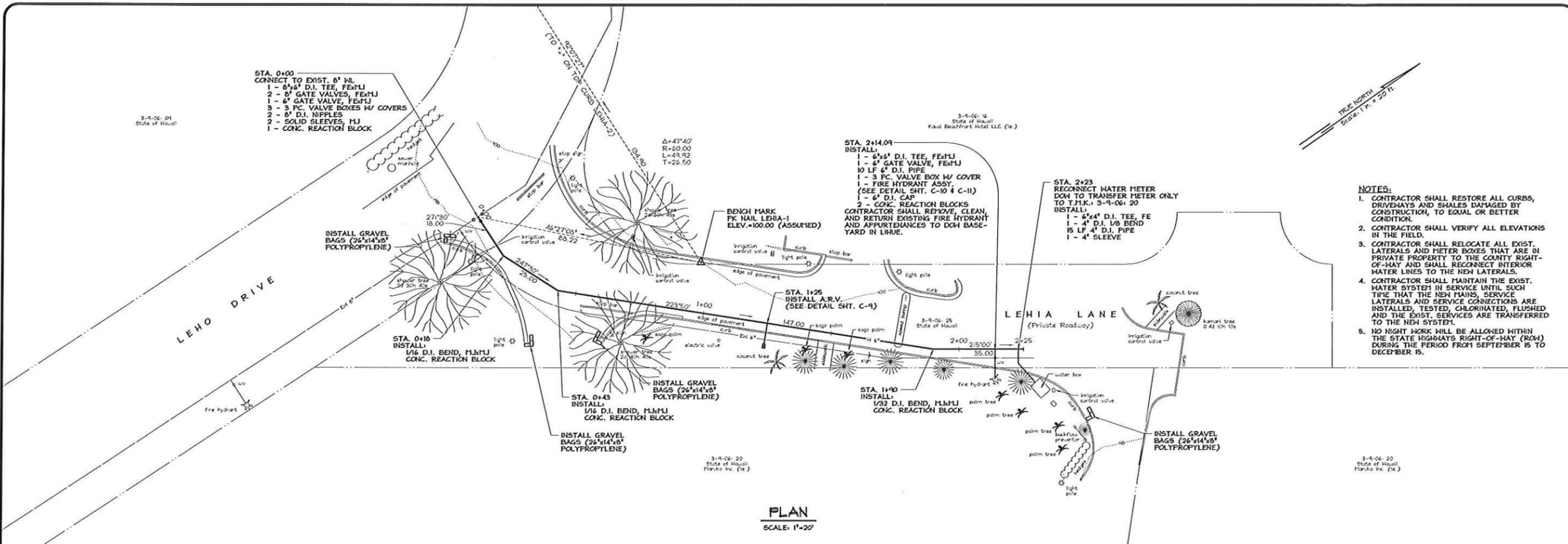
MANAGER & CHIEF ENGINEER, DEPT. OF WATER, COUNTY OF KAUAI DATE

DESIGNED BY: BF
DRAWN BY: BF
DATE: 6/11/10

SHEET
9 OF 17 SHEETS

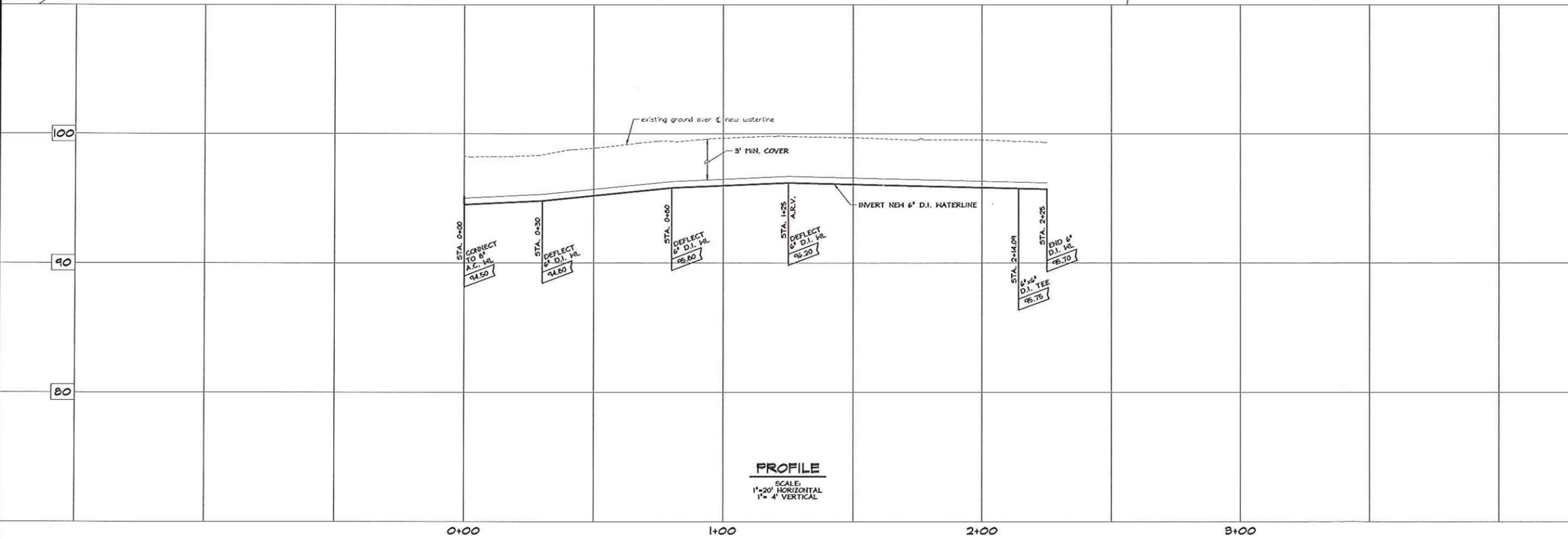


PROFILE
SCALE:
1"=20' HORIZONTAL
1"=4' VERTICAL



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PLAN
SCALE: 1"=20'



PROFILE
SCALE:
1"=20' HORIZONTAL
1"=4' VERTICAL

REVISION	DATE	DESCRIPTION	BY	APPROVED



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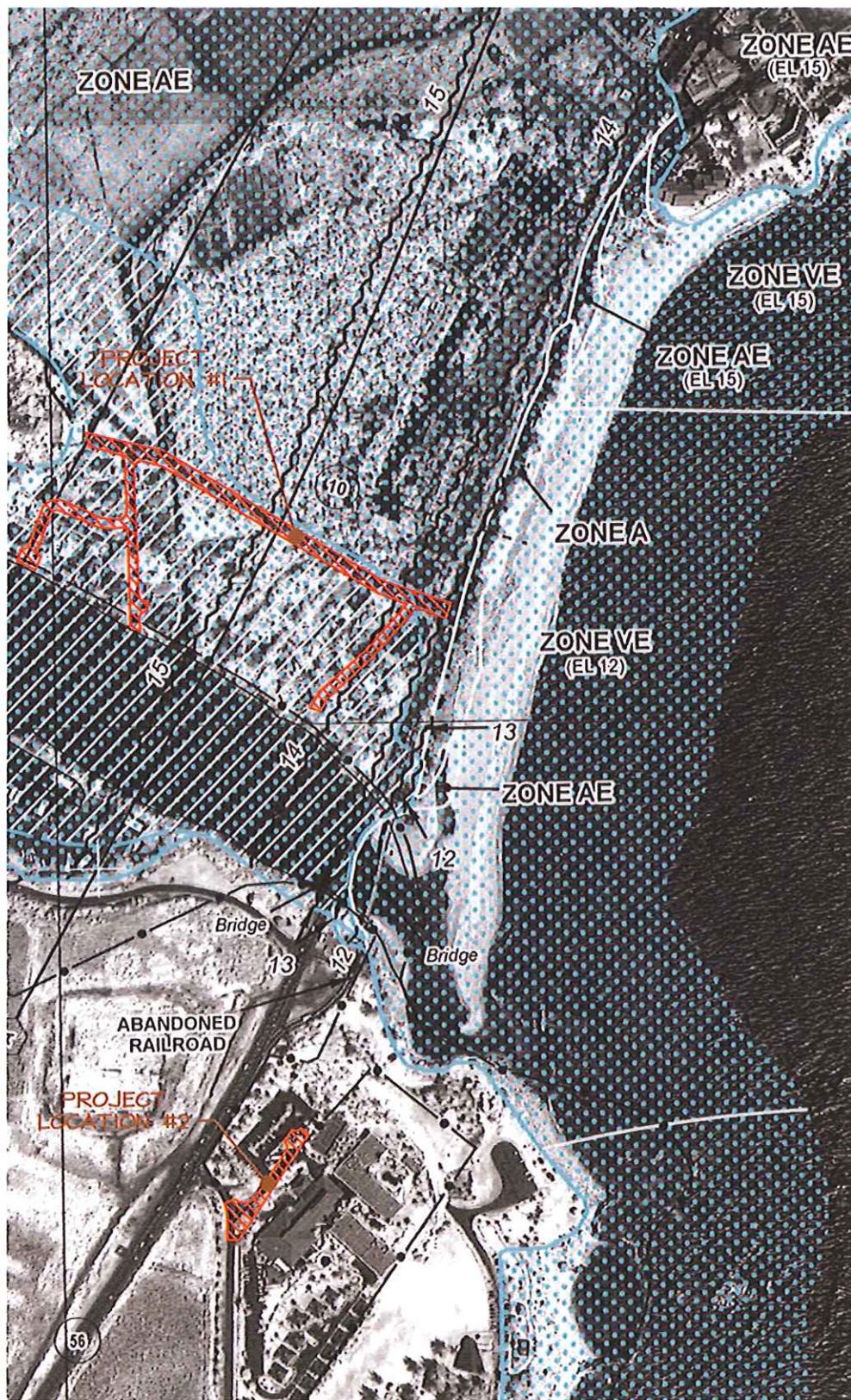
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Waipua, Lhu'e and Kowahou, Kaula, Hawai'i
CLIENT:
DEPARTMENT OF WATER

**PLAN AND PROFILE
LEHIA LANE**

APPROVED:
COUNTY ENGINEER, DEPT. OF PUBLIC WORKS, COUNTY OF KAUAI (FOR WORK WITHIN COUNTY B/W) DATE
MANAGER & CHIEF ENGINEER, DEPT. OF WATER, COUNTY OF KAUAI DATE

DESIGNED BY: *BF* SHEET
DRAWN BY: *BF*
DATE: 6/11/10 10 OF 17 SHEETS

Project No.: 03-06
Drawing File: 03-06C.dwg



LEGEND

SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD

The 1% annual flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V, and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

ZONE A	No Base Flood Elevations determined.
ZONE AE	Base Flood Elevations determined.
ZONE AH	Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.
ZONE AO	Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.
ZONE AR	Special Flood Hazard Area formerly protected from the 1% annual chance flood by a flood control system that was subsequently derelictified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.
ZONE A99	Area to be protected from 1% annual chance flood by a Federal flood protection system under construction; no Base Flood Elevations determined.
ZONE V	Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations determined.
ZONE VE	Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.

FLOODWAY AREAS IN ZONE AE

The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

OTHER FLOOD AREAS

ZONE X
Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

OTHER AREAS

ZONE X
Areas determined to be outside the 0.2% annual chance floodplain.

ZONE D
Areas in which flood hazards are undetermined, but possible.

COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS

OTHERWISE PROTECTED AREAS (OPAs)

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

- 1% annual chance floodplain boundary
- 0.2% annual chance floodplain boundary
- Floodway boundary
- Zone D boundary
- CBRS and OPA boundary
- Boundary dividing Special Flood Hazard Area Zones and boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths or flood velocities.
- Base Flood Elevation line and value; elevation in feet*
- Base Flood Elevation value where uniform within zone; elevation in feet*

* Referenced to the LOCAL TIDAL DATUM

- Cross section line
- Transsect line
- 87°07'45", 32°22'30" Geographic coordinates referenced to the North American Datum of 1983 (NAD 83), Western Hemisphere
- 76°N 1000-meter Universal Transverse Mercator grid values, zone 4N
- 600000 FT 5000-foot grid values; Hawaii State Plane coordinate system, zone 4 (FIPSZONE 5104), Transverse Mercator projection
- DX5510 x Bench mark (see explanation in Notes to Users section of this FIRM panel)
- M1.5 River Mile

MAP REPOSITORY
Department of Public Works, Engineering Division, 3021 Uni Street, Lihua, Hawaii 96766
(Maps available for reference only, not for distribution)

INITIAL NFIP MAP DATE
December 29, 1974

FLOOD HAZARD BOUNDARY MAP REVISIONS
December 29, 1977

FLOOD INSURANCE RATE MAP EFFECTIVE
November 4, 1981

FLOOD INSURANCE RATE MAP REVISIONS
March 4, 1987 - September 30, 1995 - October 18, 2002 - September 18, 2005 - November 25, 2019
For description of revisions, see Notice to Flood Insurance Study Users page in the Flood Insurance Study report.

To determine if flood insurance is available in this community, contact your Insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

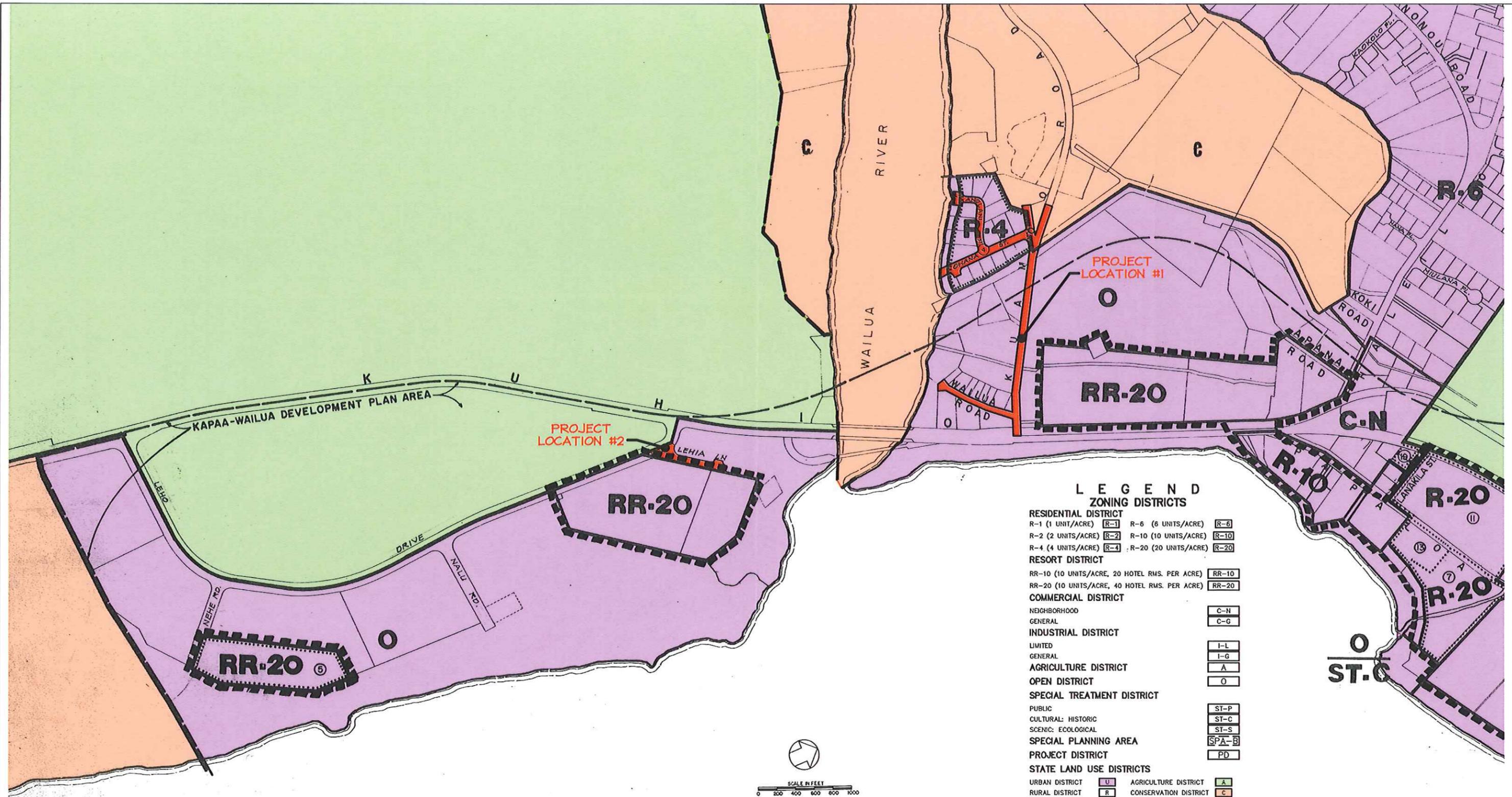
MAP SCALE 1" = 500'

250 0 500 1000 FEET

150 0 150 300 METERS

ESAKI SURVEYING AND MAPPING, INC.
Engineers, Land Surveyors & Planners
1610 Haleukana Street
Līhu'e, Kaua'i, Hawai'i

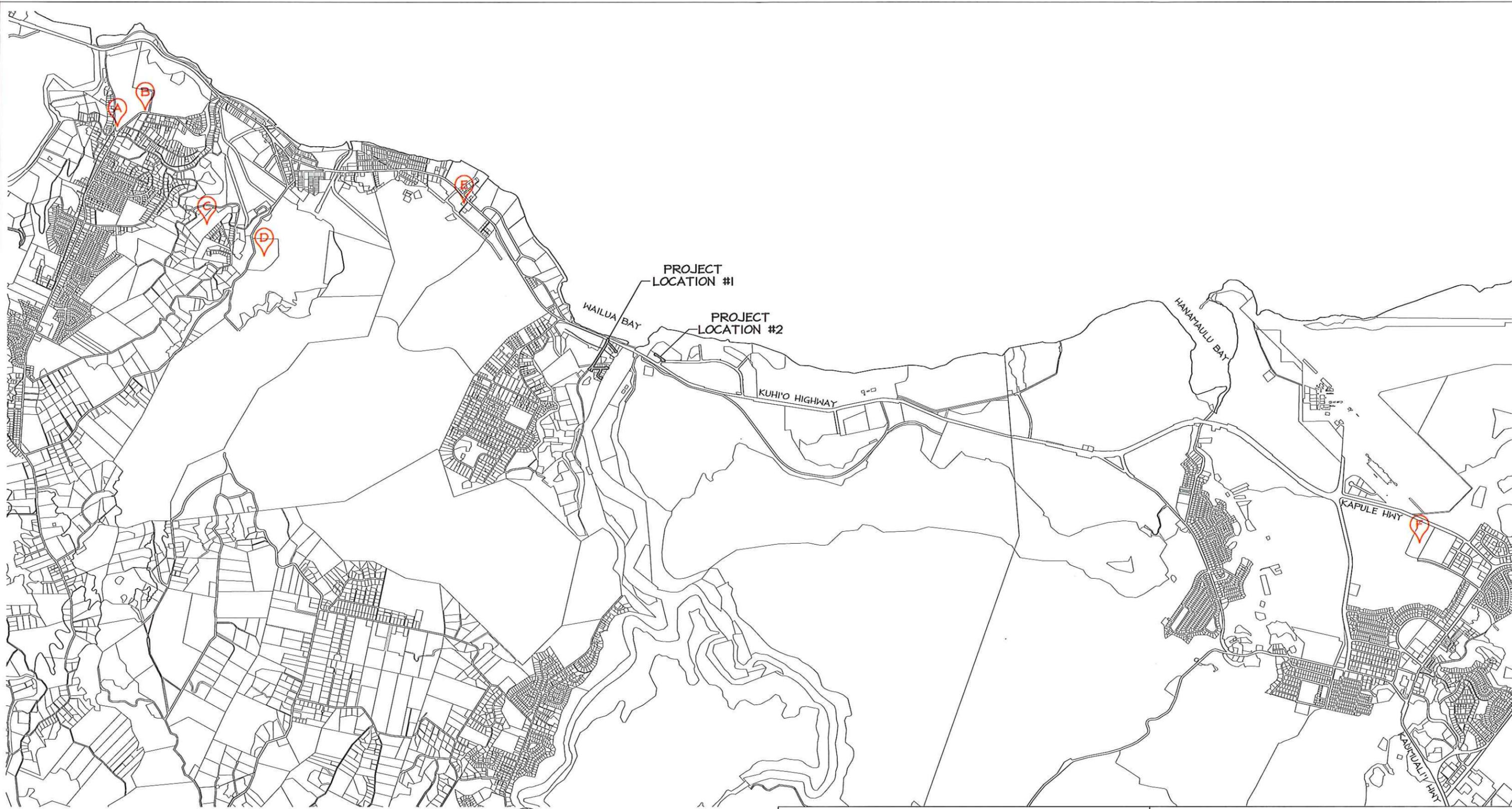
FIGURE 14
FLOOD INSURANCE RATE MAP
PIPELINE REPLACEMENT ALONG KUAMO'O
AND WAILUA ROADS, 'OHANA AND ANOLANI
STREETS AND LEHIA LANE
JOB NO. 02-16, WK-36
Wailua, Līhu'e and Kawaihau, Kaua'i, Hawai'i



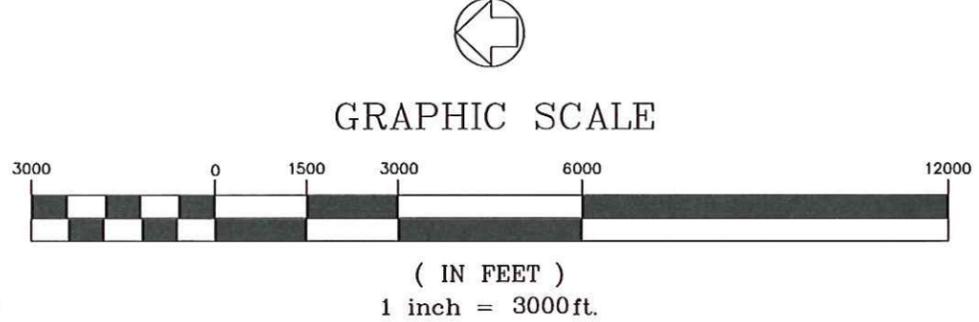
① Amended from Open District to R-20 District by COUNCIL 7-3-73 Ordinance No. 177
 ② Amended from R-20 District to CG District by COUNCIL 4-16-74 Ordinance No. 212
 ③ Amended from Agriculture District to Residential District by COUNCIL 3-20-74 Ordinance No. 207
 ④ Amended from Open District to R-4 District by COUNCIL 4-16-74 Ordinance No. 212
 ⑤ Amended from Open District to RR-20 District by COUNCIL 8-6-74 Ordinance No. 235
 ⑥ Amended from Open District to R-20 District by COUNCIL 2-17-76 Ordinance No. 278
 ⑦ Amended from Open District to R-20 District by COUNCIL 2-15-77 Ordinance No. 298
 ⑧ Amended from Agriculture District to General Commercial District by COUNCIL 6-5-78 Ord. No. FM-9-78
 ⑨ Amended from Open District to Neighborhood Commercial District by COUNCIL 12-19-78 Ord. No. FM-21-78
 ⑩ Amended from Agriculture (A) & Open (O) District to Res. (R-20) & General Comm. (C-G) District by COUNCIL 4-3-79 Ord. No. FM-49-79
 ⑪ Amended from Residential District (R-10) to Residential District (R-20) by COUNCIL 12-4-79 Ord. No. FM-52-79
 ⑫ Amended from Open District (O) to Neighborhood Commercial District (C-N) by COUNCIL 1-15-80 Ord. No. FM-55-80
 ⑬ Amended from Open District (O) to Residential District (R-20) by COUNCIL 12-11-80 Ord. No. FM-73-80
 ⑭ Amended from Agriculture District (A) to Limited Industrial District (I-L) by COUNCIL 12-17-82 Ord. No. FM-104-82
 ⑮ Amended from Open District (O) to Neighborhood Commercial District (C-N) by COUNCIL 10-14-83 Ord. No. FM-113-83
 ⑯ Amended from Residential District (R-20) to General Commercial District (C-G) by COUNCIL 10-18-84 Ord. No. FM-128-85
 ⑰ Amended from Agriculture District (A) to General Commercial District (C-G) by COUNCIL 9-27-89 Ord. No. FM-196-89
 ⑱ Amended from Open District to RR-20 and RR-20 to Open FM-250-92, ZA-91-1
 ⑲ Amended from R-10 to C-N FM-345-99, 4-28-99, ZA-99-2

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 Engineers, Land Surveyors & Planners
 1610 Haleukona Street
 Līhu'e, Kava'i, Hawai'i

FIGURE 15
ZONING MAP
 PIPELINE REPLACEMENT ALONG KUAMO'O
 AND WAILUA ROADS, 'OHANA AND ANOLANI
 STREETS AND LEHIA LANE
 JOB NO. 02-16, WK-36
 Wailua, Līhu'e and Kawaihau, Kava'i, Hawai'i



- Ⓐ Kapa'a Elementary School
- Ⓑ Kapa'a High School
- Ⓒ Kapa'a Refuse Transfer Station
- Ⓓ Kapa'a Middle School
- Ⓔ Kapa'a Fire Station
- Ⓕ Kaua'i Police Department—Lihue Headquarters



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FIGURE 16
PUBLIC UTILITIES AND SERVICES MAP
 PIPELINE REPLACEMENT ALONG KUAMO'O
 AND WAILUA ROADS, 'OHANA AND ANOLANI
 STREETS AND LEHIA LANE
 JOB NO. 02-16, WK-36
 Wailua, Līhu'e and Kawaihau, Kapa'a, Hawai'i