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May 20, 2002

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OFFICE OF ENVIRONMENTAL
QUALITY CONTROL

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**FINAL ENVIRONMENTAL ASSESSMENT FOR REPLACEMENT OF COSTA AND
SAWMILL WATER TANKS AT AHUALOA
TAX MAP KEYS: 4-6-007:081 AND 4-6-008:048**

The Department of Water Supply, County of Hawaii, has completed a Final Environmental Assessment (EA) for the subject project in compliance with Chapter 343, Hawaii Revised Statutes, and Title 11, Chapter 200, Hawaii Administrative Rules.

Enclosed are four copies of the Final EA, an OEQC Bulletin Publication Form, a "Dear Participant" letter, and a distribution list for the EA. The project summary has also been provided via e-mail message from our consultant Mr. Ron Terry to OEQC (rterry@interpac.net - header, "Ahualoa Water Tank Final EA Description") in May 2002.

Should you have any questions, please call Ms. Shari Komata at (808) 961-8070, extension 252.

Sincerely yours,

Milton D. Pavao, P.E.
Manager

SHK:jkh

Enc.

...Water brings progress...

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JUN 8 2002

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2002-06-08-HI-FEA-Ahualoa Water Tank
Replacement

FINAL ENVIRONMENTAL ASSESSMENT

**REPLACEMENT OF COSTA AND SAWMILL
WATER TANKS AT AHUALOA**

TMK (3rd): 4-6-07:81 and 4-6-08:48
Ahualoa, Hamakua District, Hawai'i Island, State of Hawai'i

May 2002

Prepared for:

Hawai'i County Department of Water Supply
345 Kekuanaoa Street, Suite 20
Hilo, Hawai'i 96720

FINAL ENVIRONMENTAL ASSESSMENT

Replacement of Costa and Sawmill Water Tanks at Ahualoa

TMK (3rd) 4-6-07:81 and 4-6-08:48
Ahualoa, Hamakua District, Island of Hawai'i, State of Hawai'i

**PROPOSING/
APPROVING AGENCY:**

County of Hawai'i
Department of Water Supply
345 Kekuanaoa Street, Suite 20
Hilo, Hawai'i 96720

CONSULTANT:

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and

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Hilo HI 96720

CLASS OF ACTION:

Use of County Land
Use of County Funds

This document is prepared pursuant to:

The Hawai'i Environmental Protection Act,
Chapter 343, Hawai'i Revised Statutes (HRS), and
Title 11, Chapter 200, Hawai'i Department of Health Administrative Rules (HAR).

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SUMMARY OF THE PROPOSED ACTION ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

The County of Hawai'i, Department of Water Supply (DWS) plans to replace two existing water tanks in Ahualoa with two new tanks. The improvements are necessary because the existing steel water tanks have reached the end of their service life, are undersized and have required expensive maintenance. The new tanks will be twice as large as the existing tanks, and thus better able to meet future demands in their water service area. Furthermore, they will be made of reinforced concrete (the standard for new tanks), which will make them easier to maintain. Because the new facilities will be larger than the existing facilities, larger lot sizes are required; DWS has purchased adjacent or nearby property for this purpose. Each site will have a 100,000-gallon concrete tank, an asphalt concrete pavement driveway, a 6-foot high chain link fence along the perimeter, site landscaping, and associated water mains to connect the new tanks to the existing water distribution system. The facilities would promote public health and safety by improving water service for the Ahualoa community. The contractor will be required to develop a traffic control plan during the design phase to minimize congestion and maintain access to adjacent properties during construction. The contractor shall perform all earthwork and grading in conformance with Chapter 10, Erosion and Sediment Control, Hawai'i County Code, and to develop and implement a plan to contain any sediment that might leave the site in runoff during construction. Furthermore, construction equipment shall be kept in good working condition to minimize the risk of fluid leaks that could enter runoff and groundwater. Significant leaks or spills, if they occur, shall be properly cleaned up and disposed of at an approved site. Existing eucalyptus trees will be removed, and the native koai'e tree will be planted for landscaping. If archaeological resources are encountered during land-altering activities associated with construction, work in the immediate area of the discovery will be halted and the State Historic Preservation Division will be contacted.

**PART 1: PROJECT DESCRIPTION, PURPOSE AND NEED
AND ENVIRONMENTAL ASSESSMENT PROCESS**

1.1 Project Description and Location

The County of Hawai'i, Department of Water Supply (DWS) plans to replace two existing water tanks in Ahualoa with two new tanks (Figs. 1a-e; 2a-f). Because the new facilities will be larger than the existing facilities, larger sites are required; DWS has purchased adjacent or nearby property (TMKs 4-6-07:81 and a 15,001 square foot portion of 4-6-8-34, which was subdivided out of parcel 34 and consolidated into 4-6-8:48) for this purpose (Fig. 2c). Each site will have a 100,000-gallon concrete tank, an asphalt concrete pavement driveway, a 6-foot high chain link fence along the perimeter, site landscaping, and associated water mains to connect the new tanks to the existing water distribution system.

1.2 Purpose and Need

The facilities are needed to promote public health and safety by improving water service for the Ahualoa community. The improvements are necessary because the existing steel water tanks have reached the end of their service life, are undersized and have required expensive maintenance. The new tanks will be twice as large as the existing tanks, and thus better able to meet future demands in their water service area. Furthermore, they will be made of reinforced concrete (the standard for new tanks), which will make them easier to maintain.

1.3 Summary of Regulatory Requirements

This Environmental Assessment (EA) process is being conducted in accordance with Chapter 343 of the Hawai'i Revised Statutes (HRS). This law, along with its implementing regulations, Title 11, Chapter 200, of the Hawai'i Administrative Rules (HAR), is the basis for the environmental impact process in the State of Hawai'i. According to Chapter 343, an EA is prepared to determine impacts associated with an action, to develop mitigation measures for adverse impacts, and to determine whether any of the impacts are significant according to thirteen specific criteria. Part 4 of this document states the anticipated finding that no significant impacts are expected to occur; Part 5 lists each criterion and presents the preliminary findings for each made by the Hawai'i County Department of Water Supply, the proposing agency. If, after considering comments to the Draft EA, the proposing agency concludes that, as anticipated, no significant impacts would be expected to occur, then the agency will issue a Finding of No Significant Impact (FONSI), and the action will be permitted to occur. If the agency concludes that significant impacts are expected to occur as a result of the proposed action, then an Environmental Impact Statement (EIS) will be prepared.

1.4 Public Involvement and Agency Coordination

The following agencies and organizations were consulted in development of the environmental assessment.

State:

Department of Land and Natural Resources, Historic Preservation Division

County:

Planning Department
Public Works Department
Police Department

Private:

Ahualoa Community Association
Waimea Outdoor Circle

Copies of communications received during preconsultation are contained in Appendix 4.

Two letters were received in response to the Draft EA during the 30-day comment period that ended April 23, 2002, from the Hawai'i State Historic Preservation Division and the Hawai'i County Planning Department. The comment letters and responses to them are included in Appendix 5. Information from these letters was added for the Final EA; such information is underlined with dotted lines in the text of the Final EA.

PART 2: ALTERNATIVES

2.1 No Action

Under the No Action Alternative, the water tanks would not be replaced. The quality of water service in Ahualoa would suffer. Because of its mandate to provide reliable and high-quality water service to all its customers, the Hawai'i County Department of Water Supply considers the No-Action Alternative unacceptable.

2.2 Alternative Locations or Strategies

During early phases of project planning, DWS examined the Ahualoa area and determined that the project sites provided the best overall location for the required function. As there do not appear to be any environmental or other disadvantages associated with the proposed site, no alternative sites have been advanced in the Environmental Assessment. There is no other approach to water storage and transmission that would accomplish the goals of the project.

PART 3: ENVIRONMENTAL SETTING, IMPACTS AND MITIGATION MEASURES

Basic Geographic Setting

The parcels upon which the water tanks would be relocated are referred to throughout this EA the *project sites*, and are individually called the Costa and Sawmill sites. The term *project area* is used to describe the general environs of Ahualoa.

The proposed Costa site is located at 1,900 feet in elevation along the Kapana Road, a few hundred feet from the existing site on old Mamalahoa Highway. The proposed Sawmill and existing Sawmill site are located adjacent to each other at about 2,240 feet in elevation on old Mamalahoa Highway. Both sites have secondary, non-native vegetation. The vegetation of the Ahualoa area has been extensively modified for farming, ranching, and house sites, and the project sites are covered with secondary, non-native forest typical of the area. The average maximum daily temperature is approximately 75 degrees F., with an average minimum of 65 degrees, and annual rainfall averages approximately 100 inches (U.H. Hilo-Geography 1998:57). Adjacent land is mainly residential/small-scale farming and ranching

3.1 Physical Environment

3.1.1 Geology, Soils and Geologic Hazards

Environmental Setting

Geologically, Ahualoa is located on the lower flank of the dormant Mauna Kea. The surface consists of weathered ash soils on Pleistocene-era lava flows that vary considerably with topography. The Costa site soil is classified by the Soil Conservation Service as Rough Broken Land, a highly variable, miscellaneous soil type that is often centered on gulches. The Sawmill site is Honokaa Silty Clay Loam, which is typically dark brown with a six-inch thick surface layer. Permeability is rapid, runoff slow, and erosion hazard slight. Its Capability Subclass is IV, and it is mainly used for pasture and woodland (U.S. Soil Conservation Service 1973).

The entire Big Island is subject to geologic hazards, especially lava flows and earthquakes. Volcanic hazard as assessed by the United States Geological Survey is 8 on a scale of ascending risk 9 to 1 (Heliker 1990:23). The low hazard risk is based on the fact that only a few percent of surrounding areas have been covered by lava in the past 10,000 years. In terms of seismic risk, the entire Island of Hawai'i is rated Zone 4 Seismic Probability Rating (*Uniform Building Code, 1997 Edition, Figure 16-2*). Zone 4 areas are at risk from major earthquake damage, especially to structures that are poorly designed or built. The project site does not appear to be subject to subsidence, landslides or other forms of mass wasting.

Impacts and Mitigation Measures

In general, geologic conditions impose no constraints on the proposed action, and the proposed water system improvements are not imprudent to construct.

3.1.2 Drainage, Water Features and Water Quality

Existing Environment

The Hamakua District is heavily dissected by a radial network of sub-parallel permanent streams, typical of weathered volcanoes in humid climates. Ahualoa Gulch runs about 400 feet east of the Sawmill site, and about 200 feet east of the Cosia site there is an unnamed stream tributary to Kuilei Stream.

The *Hawai'i Stream Assessment* (Hawai'i State CWRM 1990) inventoried streams statewide (including over a hundred on the Hilo/Hamakua coast) for their water quality/supply, habitat, cultural and recreational resource value. Streams are ranked in various resources categories. Of particular importance are the *Candidate Streams for Protection*, which meet the criteria for either diversity of outstanding resources or "blue-ribbon resources." Four such streams are present on the Hamakua/Hilo coast: Waikoloa, Kolekole, Honoli'i, and Wailuku Streams. Neither Ahualoa nor Kuilei Streams, both of which have relatively small drainage areas and inconsistent flows, are inventoried in the *Hawai'i Stream Assessment*.

Both streams run in deep channels and do not pose flooding hazards to the project sites. No known areas of local (non-stream related) flooding are present. The streams near the project sites are not mapped on Flood Insurance Rate Maps (FIRM) 155166-0205C and 0200C. Groundwater in the area is basal.

Impacts and Mitigation Measure

Because of the limited scale of construction and the environmental setting, the risks for flooding or impacts to water quality are negligible. No impacts to stream banks or stream waters should occur. However, in order to ensure that any impact is minimized, the contractor shall perform all earthwork and grading in conformance with Chapter 10, Erosion and Sediment Control, Hawai'i County Code, and to develop and implement a plan to contain any sediment that might leave the site in runoff during construction. Furthermore, construction equipment shall be kept in good working condition to minimize the risk of fluid leaks that could enter runoff and groundwater. Significant leaks or spills, if they occur, shall be properly cleaned up and disposed of at an approved site.

3.1.3 Flora, Fauna and Ecosystems

Existing Environment

The natural vegetation of this part of Hamakua was most likely sub-montane rain forest dominated by 'ohi'a (*Metrosideros polymorpha*) and koa (*Acacia koa*) (Gagne and Cuddihy 1990). These original communities, however, have been destroyed or heavily degraded by cattle grazing and clearing for farms and residences, and the vegetation of Ahualoa is now either managed vegetation (i.e., farms, pasture or landscaped grounds) or adventive "communities" of various alien weeds.

A walk-through biological survey of the project site was performed in June of 2001. The project sites have been almost completely modified by prior grazing, grading, grubbing and other alteration, and now support alien vegetation. Dominant species include guava (*Psidium guajava*), eucalyptus (*Eucalyptus* sp.), Glenwood grass (*Sacciolepis indica*), elephant grass (*Pennisetum purpureum*), and rose apple (*Syzygium jambos*). Only one native species, hapu'u i'i (*Cibotium menziesii*), was found in low numbers at one of the sites. A complete list of species found at each site is contained in Tables 1A and 1B.

Table 1A
Costa Site Species List.

Scientific Name	Family	Common Name	Life Form	Status
<i>Acacia confusa</i>	Fabaceae	Formosa koa	Tree	Alien
<i>Ageratum conyzoides</i>	Asteraceae	Maile hohono	Herb	Alien
<i>Colocasia esculenta</i>	Araceae	Taro	Herb	Alien
<i>Commelina diffusa</i>	Commelinaceae	Honohono	Herb	Alien
<i>Cyperus rotundus</i>	Cyperaceae	Nut sedge	Sedge	Alien
<i>Desmodium incanum</i>	Fabaceae	Spanish clover	Shrub	Alien
<i>Hedychium flavescens</i>	Zingiberaceae	Yellow ginger	Herb	Alien
<i>Impatiens wallerana</i>	Balsaminaceae	Impatiens	Herb	Alien
<i>Macadamia integrifolia</i>	Proteaceae	Macadamia nut	Tree	Alien
<i>Nephrolepis multiflora</i>	Nephrolepidaceae	Sword fern	Fern	Alien
<i>Panicum maximum</i>	Poaceae	Guinea grass	Grass	Alien
<i>Pennisetum purpureum</i>	Poaceae	Elephant grass	Grass	Alien
<i>Plantago major</i>	Plantaginaceae	Broad-leaved plantain	Herb	Alien
<i>Psidium guajava</i>	Myrtaceae	Guava	Tree	Alien
<i>Rubus rosifolius</i>	Rosaceae	Thimbleberry	Shrub	Alien
<i>Sambucus mexicana</i>	Caprifoliaceae	Mexican elder	Shrub	Alien
<i>Setaria palmifolia</i>	Poaceae	Palm grass	Grass	Alien
<i>Syzygium jambos</i>	Myrtaceae	Rose apple	Tree	Alien
<i>Wedelia trilobata</i>	Asteraceae	Wedelia	Herb	Alien

**Table 1B
Sawmill Site Species List**

Scientific Name	Family	Common Name	Life Form	Status
Casuarina equisetifolia	Casuarinaceae	Ironwood	Tree	Alien
Cibotium menziesii	Dicksoniaceae	Hapu'u i'i	Fern	Endemic
Eucalyptus sp.	Myrtaceae	Eucalyptus	Tree	Alien
Hedychium flavescens	Zingiberaceae	Yellow ginger	Herb	Alien
Hypochoeris radicata	Asteraceae	Hairy cat's-ear	Herb	Alien
Pennisetum purpureum	Poaceae	Elephant grass	Grass	Alien
Psidium guajava	Myrtaceae	Guava	Tree	Alien
Sacciolepis indica	Poaceae	Glenwood grass	Grass	Alien
Stachytarpheta jamaicensis	Verbenaceae	Vervain	Herb	Alien

No listed, candidate or proposed endangered animal or plant species were found or would be expected to be found on the project sites. In terms of conservation value, no botanical or zoological resources requiring special protection are present.

Impacts and Mitigation Measures

Because of the lack of native ecosystems, or threatened or endangered plant species, no adverse impacts would occur as a result of clearing and improvements. However, a landscaping plan for the water tanks incorporates the native koai'e tree (see Figs. 2e-f), which will mitigate any impact to the aesthetic and erosion control functions of the vegetation.

3.1.4 Air Quality, Noise, and Scenic Resources

Environmental Setting

Air pollution in East Hawai'i is minimal, and is mainly derived from volcanic emissions of sulfur dioxide, which convert into particulate sulfate and produce a volcanic haze (vog) that occasionally blankets the district. The persistent tradewinds keep Hamakua relatively free of vog for most of the year.

Noise on the project sites is low and derived mainly from motor vehicles, with occasional noise from residential, ranching, farming and road maintenance activities.

The Costa site is largely hidden from view; the Sawmill Site has some scenic value in that it contains some of the large eucalyptus trees that line the Old Mamalahoa Highway and give it some of its character. No important viewplanes or scenic sites recognized in the Hawai'i County General Plan, which recognizes a number of important vistas and scenic landmarks in Hamakua, are present (Hawai'i County Planning Department 1989: Exh. C, p. 34). The nearest such scenic area is Ahualoa Road, which intersects the Old Mamalahoa Highway about a mile mauka of the Sawmill Water Tank.

Impacts and Mitigation Measures

The proposed action would not measurably affect air quality or noise levels except minimally during construction. Removal of eucalyptus trees would be required in order to site the tank on the property. Figs. 2-e & f identify the eucalyptus trees that would be removed and illustrate the landscaping plan, which will incorporate the native koai'e tree. Given the landscaping plan, the removal of existing trees would not substantially affect the scenic character of the tree-lined road, which will be enhanced by the native plantings. No important viewplanes or scenic sites recognized in the Hawai'i County General Plan would be affected.

3.1.5 Hazardous Substances, Toxic Waste and Hazardous Conditions

Muranaka Environmental Consultants Inc. inspected the ground pipes for lead and the reservoirs for lead-containing paint. A letter report detailing the inspection is attached to this EA as Appendix 3. Lead paint was detected.

When lead-containing paint is disturbed during demolition work, OSHA regulations must be complied with. All lead containing paint must undergo testing to determine if it may be disposed of in a municipal landfill. Metal debris coated with lead paint may be sent to recyclers as scrap metal without removing the paint.

Based on onsite inspection and information on file, it appears that the project sites contain no other hazardous or toxic substances and exhibit no other hazardous conditions. No permanent or temporary land use that would tend to result in these conditions appears to have ever occurred on the project sites, which are former pasture and agricultural land.

3.2 Socioeconomic and Cultural

3.2.1 Socioeconomic Characteristics

The project occurs within and would both affect and benefit the district of Hamakua, most specifically Ahualoa. No 2000 census data for Ahualoa are currently available; Table 2 provides information on the socioeconomic characteristics of Honoka'a, the area directly adjacent to Ahualoa, along with those of Hawai'i County as a whole for comparison, from the 2000 census.

Impacts

The proposed project would benefit public health in Ahualoa through maintenance of the continued quality of water supply.

Table 2
Selected Socioeconomic Characteristics

CHARACTERISTIC	Hawai'i Island	Honoka'a
Total Population	148,677	2,233
Percent Caucasian	31.5	25.0
Percent Asian	26.7	42.9
Percent Hawaiian	9.7	3.9
Percent Two or More Races	28.4	27.0
Median Age (Years)	38.6	40.2
Percent Under 18 Years	26.1	25.2
Percent Over 65 Years	13.5	21.6
Percent Households with Children	21.3	37.2
Average Household Size	2.75	2.88
Percent Housing Vacant	15.5	8.9

Source: U.S. Bureau of the Census. May 2001. *Profiles of General Demographic Characteristics, 2000 Census of Population and Housing, Hawai'i*. (U.S. Census Bureau Web Page).

3.2.2 Cultural Setting

Existing Environment

A cultural and archaeological study of the area proposed for the water tanks was conducted by Rechtman Consulting, Inc. It is attached as Appendix 2 and summarized in this and the next section.

The purpose of the study was to document the presence of any historic properties or traditional cultural properties that might exist within the project area, assess the significance of any such resources, and provide a statement of impact to any such resources as a result of the proposed construction of the water tanks. The study used historic maps and documents, archaeological summaries of the area, and field investigation. This information provided a context for the search for potential historic or traditional cultural properties.

The portion of the Ahualoa Homesteads containing the project sites appears to have been carved out of the upper reaches of at least four ahupua'a: Lauka, Kuliah'i, Koloaha, and Ahualoa. These are all relatively narrow and short land units that are cut off on the mauka sides by the ahupua'a of Nienie, which in turn is cut off on its mauka side by

Pa'auhau ahupua'a. Cordy (1994) documented land use patterns gleaned from Mahele records. At an elevation of roughly 1,900 feet, the project sites are situated near the boundary of the Seaward Upper Slopes and the 'Ohi'a-Koa Forest Zone (Ibid:61-62). It is likely that during precontact times the general area supported a forest canopy, perhaps interrupted in areas by long in linear dryland taro fields. The forest zone in Hamakua was traditionally a location for collecting wauke and mamaki bark for fish nets and cloth, for bird catching to obtain feathers, and for harvesting koa canoe logs. Natural features such as caves as well as temporary open-air shelters were used as short-term habitations during resource extraction expeditions. Access to the upper forest areas would have been along repeatedly used trails, which may have left traces on the landscape.

By the time of the Mahele in the 19th century use of such areas undoubtedly diminished. Very few kuleana were awarded in the above-named ahupua'a, and all were well makai of the project sites.

Both sites are located on portions of grants given out during the first and second series of grants in the Ahualoa Homesteads area during the late 19th century. The land appears to have been used for sugar cane, and then converted to homesteads.

No caves, springs, pu'u, native forest groves or other natural features are present on or near the project sites.

Impacts and Mitigation Measures

Given the nature of the past land use in the area – sugarcane cultivation in the middle to late nineteenth century and Homestead Grants with commensurate intensive residential and agricultural use starting as early as 1889 – it would appear that the projects sites are not in an area that has retained any traditional gathering uses or other cultural practices.

No resources of a potential traditional cultural nature (i.e., landform, vegetation, etc.) appear to be present on or near the project site. Therefore, the proposed construction and maintenance would not impact any culturally valued resources or cultural practices.

3.2.3 Archaeology and Historic Sites

Existing Environment

On June 16, 2001, field investigators performed an intensive and comprehensive reconnaissance of the entire ground surface, which had excellent ground visibility. No archaeological resources, either traditional (e.g., stone structures or trails) or late historic, were observed at the project site.

Impacts and Mitigation Measures

As no historic site resources are present, no adverse effect to historic sites would occur as a result of implementing the project. Accordingly, it is recommended that DLNR-SHPD require no further historic preservation work prior to construction. However, in the highly unlikely event that archaeological resources are encountered during land-altering activities associated with construction, work in the immediate area of the discovery should be halted and DLNR-SHPD contacted as outlined in draft Hawai'i Administrative Rules 13§13-280. DLNR-SHPD concurred with the findings of the archaeologist in a letter of 13 February 2002 (See App. 4)

3.3 Infrastructure

3.3.1 Utilities

Existing Facilities and Services

Electrical power to the facility is supplied by on the island of Hawai'i is provided by Hawai'i Electric Light Company (HELCO), a privately owned utility company regulated by the State Public Utilities Commission, via their island-wide distribution network. As 2000, HELCO had a total of over 50,000 residential customers and more than 10,000 General Load, Commercial Cooking and Heating, Large Power Service, and Street Lighting accounts (Hawai'i County R&D: 2000). HELCO's distribution system principally of overhead (with limited underground) transmission lines. Overhead lines typically consist of 46 kilovolt (kV) or 12.47 kV primary circuits routed largely along highways and roadways. Electrical service is available at the project sites.

Telephone service is available, but not required, for the project. No wastewater system is available or necessary for the project.

Impacts and Mitigation Measures

The proposed action would not have any substantial on existing electrical facilities or HELCO's ability to provide electricity. Appropriate coordination with HELCO will be conducted during the design and construction of the improvements. No other utilities will be affected in any way.

3.3.2 Roadways

Existing Facilities

The Old Mamalahoa Highway in the vicinity of Ahualoa is part of a round-the-island roadway system established in the early 20th century and later replaced by the Hawai'i Belt Road (State Highway 19). The road is a relatively narrow two-lane facility with

only intermittent shoulders, maintained by the County of Hawai'i. Kapana Road is a narrow local street also maintained by the County. Both roads are paved.

Impacts and Mitigation Measures

As existing water tanks are already present, no new operational use of these roadways would be expected. The proposed action would require construction vehicles needed for grading, hauling fill and construction to access the project sites during a period of several months. The contractor will be required to develop a traffic control plan during the design phase of the project that will outline the steps needed to minimize congestion and maintain access to adjacent properties at all times during construction. Implementation of construction will be coordinated with agencies to prevent conflicts in activities.

3.4 Secondary and Cumulative Impacts

The proposed project will not involve any secondary impacts, such as population changes or effects on public facilities, because it simply fulfills the mandate of the Department of Water Supply to provide high-quality service to its customers. Although the project would provide some short-term construction jobs, these would almost certainly be filled by local residents and would not induce in-migration.

Cumulative impacts result when implementation of several projects that individually have limited impacts combine to produce more severe impacts or conflicts in mitigation measures. The adverse effects of the project – very minor and temporary disturbance to air quality, noise, visual and traffic congestion quality during construction - are very limited in severity, nature and geographic scale. There do not appear to be any roadway, utility or development projects being undertaken in the Ahualoa area that would combine in such a way as to produce adverse cumulative effects or involve a commitment for larger actions.

3.5 Required Permits and Approvals

The following permits and approvals would be required:

- Hawai'i County Building Division Approval
- Hawai'i County Planning Department Approval
- Hawai'i County Public Works Department Grading Permit

3.6 Consistency With Government Plans and Policies

The Hawai'i State Plan. Adopted in 1978 and last revised in 1991 (Hawai'i Revised Statutes, Chapter 226, as amended), the Plan establishes a set of themes, goals, objectives and policies that are meant to guide the State's long-run growth and development activities. The three themes that express the basic purpose of the *Hawai'i State Plan* are

individual and family self-sufficiency, social and economic mobility and community or social well-being. The proposed project would promote these goals by modernizing and improving water service for the Ahualoa community.

Hawai'i State Land Use Law. All land in the State of Hawai'i is classified into one of four land use categories -- Urban, Rural, Agricultural, or Conservation -- by the State Land Use Commission, pursuant to Chapter 205, HRS. The project sites are within the Agricultural District. The proposed project is a permitted use within this district.

Hawai'i County General Plan. The *General Plan* for the County of Hawai'i is a policy document expressing the broad goals and policies for the long-range development of the Island of Hawai'i. The plan was adopted by ordinance in 1989. The *General Plan* itself is organized into thirteen elements, with policies, objectives, standards, and principles for each. There are also discussions of the specific applicability of each element to the nine judicial districts comprising the County of Hawai'i. Most relevant to the proposed project is the following Goal and Standards:

J. Public Facilities (1) Water Policies:

- Water system improvements shall promote the County's desired land use pattern.
- Improve and replace inadequate systems.

Courses of Action: Hamakua: Public Facilities: Water

- Improve existing storage, transmission and distribution facilities

Discussion: The proposed project satisfies relevant goals, objectives, and courses of action related to water systems in Hamakua. It should be noted that the *Hawai'i County General Plan* is currently in the final stages of a periodic update. The proposed action is unlikely to be inconsistent with any aspect of the update.

The Hawai'i County General Plan Land Use Pattern Allocation Guide (LUPAG). The LUPAG map component of the *General Plan* is a graphic representation of the Plan's goals, policies, and standards as well as of the physical relationship between land uses. It also establishes the basic urban and non-urban form for areas within the planned public and cultural facilities, public utilities and safety features, and transportation corridors. The project sites are classified as INTENSIVE AGRICULTURE in the LUPAG. The proposed project is consistent with this designation.

Hawai'i County Zoning. The project sites are both zoned A-5a (Agriculture, minimum lot size 5 acres). The proposed project is a permitted use within this designation. The properties are not situated within the County's Special Management Area (SMA).

PART 4: DETERMINATION

The Hawai'i County Department of Water Supply has determined that the proposed project will not significantly alter the environment, as impacts will be minimal, and that an Environmental Impact Statement is not warranted. Therefore, it has issued a Finding of No Significant Impact (FONSI).

PART 5: FINDINGS AND REASONS

Chapter 11-200-12, Hawai'i Administrative Rules, outlines those factors agencies must consider when determining whether an Action has significant effects:

1. *The proposed project will not involve an irrevocable commitment or loss or destruction of any natural or cultural resources.* No valuable natural or cultural resources would be committed or lost.
2. *The proposed project will not curtail the range of beneficial uses of the environment.* No restriction of beneficial uses would occur.
3. *The proposed project will not conflict with the State's long-term environmental policies.* The State's long-term environmental policies are set forth in Chapter 344, HRS. The broad goals of this policy are to conserve natural resources and enhance the quality of life. The project is minor and environmentally beneficial and fulfills aspects of these policies calling for an improved social environment. It is thus consistent with all elements of the State's long-term environmental policies.
4. *The proposed project will not substantially affect the economic or social welfare of the community or State.* The project would not have any substantial adverse effect on the economic or social welfare of the County or State, and would improve the water system infrastructure for a rural community.
5. *The proposed project does not substantially affect public health in any detrimental way.* The project would affect public health and safety in only beneficial ways through improving water service.
6. *The proposed project will not involve substantial secondary impacts, such as population changes or effects on public facilities.* No secondary effects are expected to result from the proposed action, which would simply improve water system facilities for an existing service area and would not induce in-migration or affect public facilities.
7. *The proposed project will not involve a substantial degradation of environmental quality.* The project is minor and environmentally benign, and it would thus not contribute to environmental degradation.

8. *The proposed project will not substantially affect any rare, threatened or endangered species of flora or fauna or habitat. The project sites supports overwhelmingly alien vegetation. Impacts to rare, threatened or endangered species of flora or fauna will not occur.*
9. *The proposed project is not one which is individually limited but cumulatively may have considerable effect upon the environment or involves a commitment for larger actions. The project is not related to other activities in the region in such a way as to produce adverse cumulative effects or involve a commitment for larger actions.*
10. *The proposed project will not detrimentally affect air or water quality or ambient noise levels. No adverse effects on these resources would occur.*
11. *The project does not affect nor would it likely to be damaged as a result of being located in environmentally sensitive area such as a flood plain, tsunami zone, erosion-prone area, geologically hazardous land, estuary, fresh water, or coastal area. Although the project is located in an area with seismic risk, the entire Island of Hawai'i shares this risk, and the project is not imprudent to construct.*
12. *The project will not substantially affect scenic vistas and viewplanes identified in county or state plans or studies. No County or State plan, including the Hawai'i County General Plan, identifies important views in this area.*
13. *The project will not require substantial energy consumption. The construction and operation of the facility would require minimal consumption of energy. No adverse effects would be expected.*

For the reasons above, the proposed Action will not have any significant effect in the context of Chapter 343, Hawai'i Revised Statutes and section 11-200-12 of the State Administrative Rules.

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APPENDIX 1

FIGURES

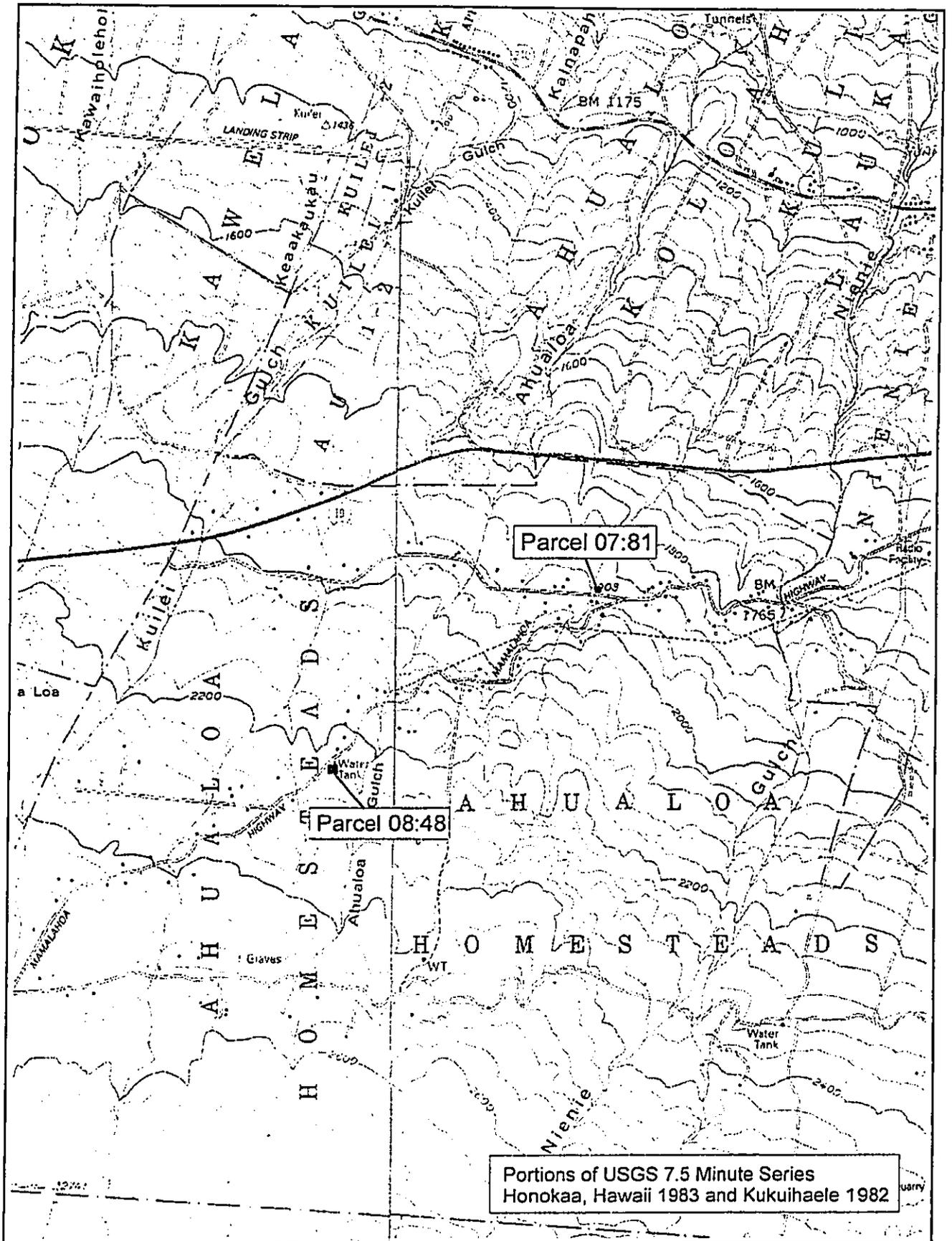
Index to Figures

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- Figure 1b Portion of TMK Map 4-6-07
- Figure 1c Portion of TMK Map 4-6-08
- Figure 1d Parcel 4-6-07:81 (Costa Site)
- Figure 1e Parcel 4-6-08:48 (Sawmill Site)
- Figure 2a Sawmill Site Plan
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- Figure 2c Costa Site Pipeline Route (pt. 1)
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- Figure 2e Landscaping Plan, Sawmill Site
- Figure 2f Landscaping Plan, Costa Site
- Figure 3 Photographs of Sawmill and Costa Sites

Figure 1a

Portion of USGS 7.5 Minute Series
Honokaa 1983 and Kukuihaele 1982

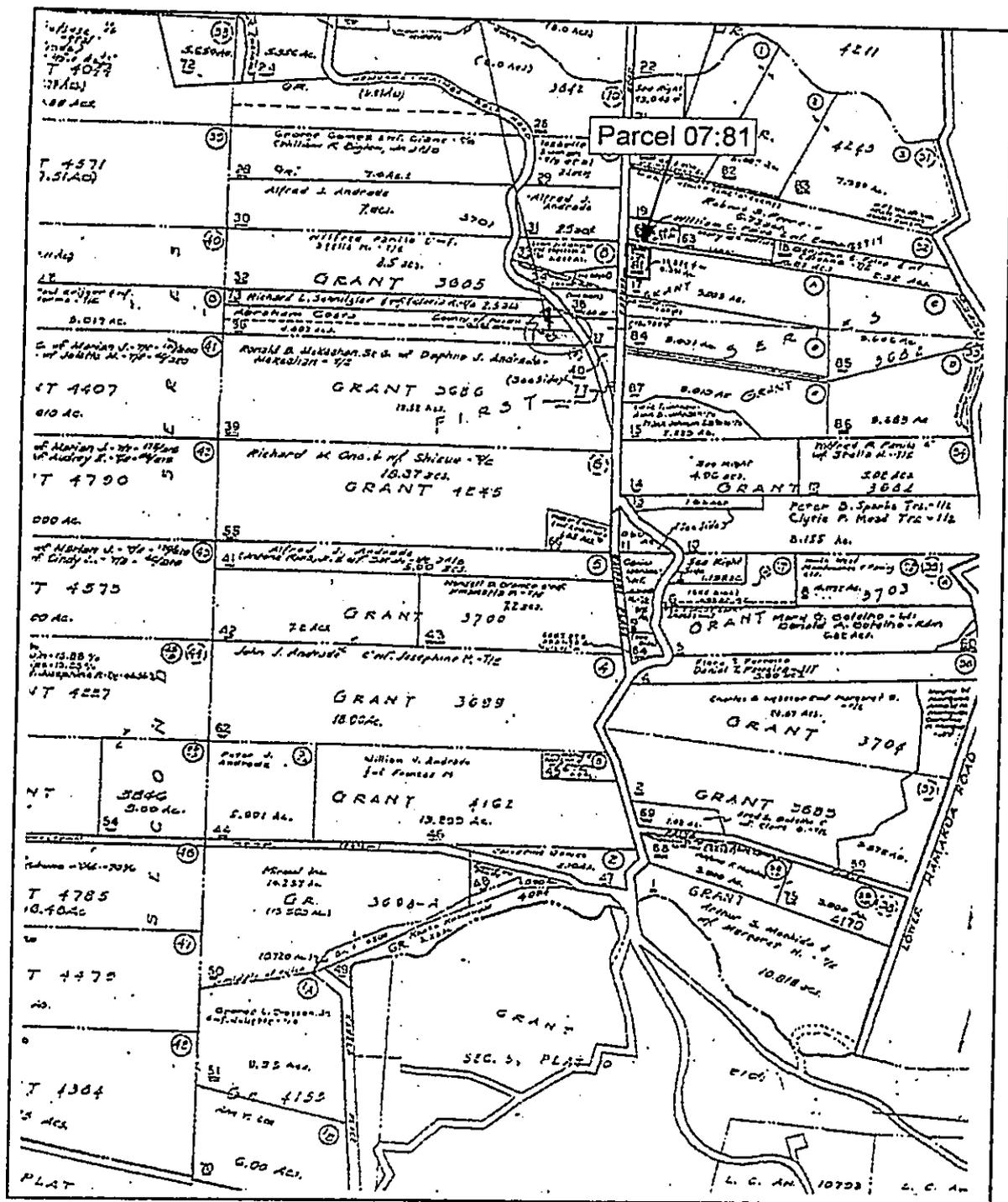
RC-0081



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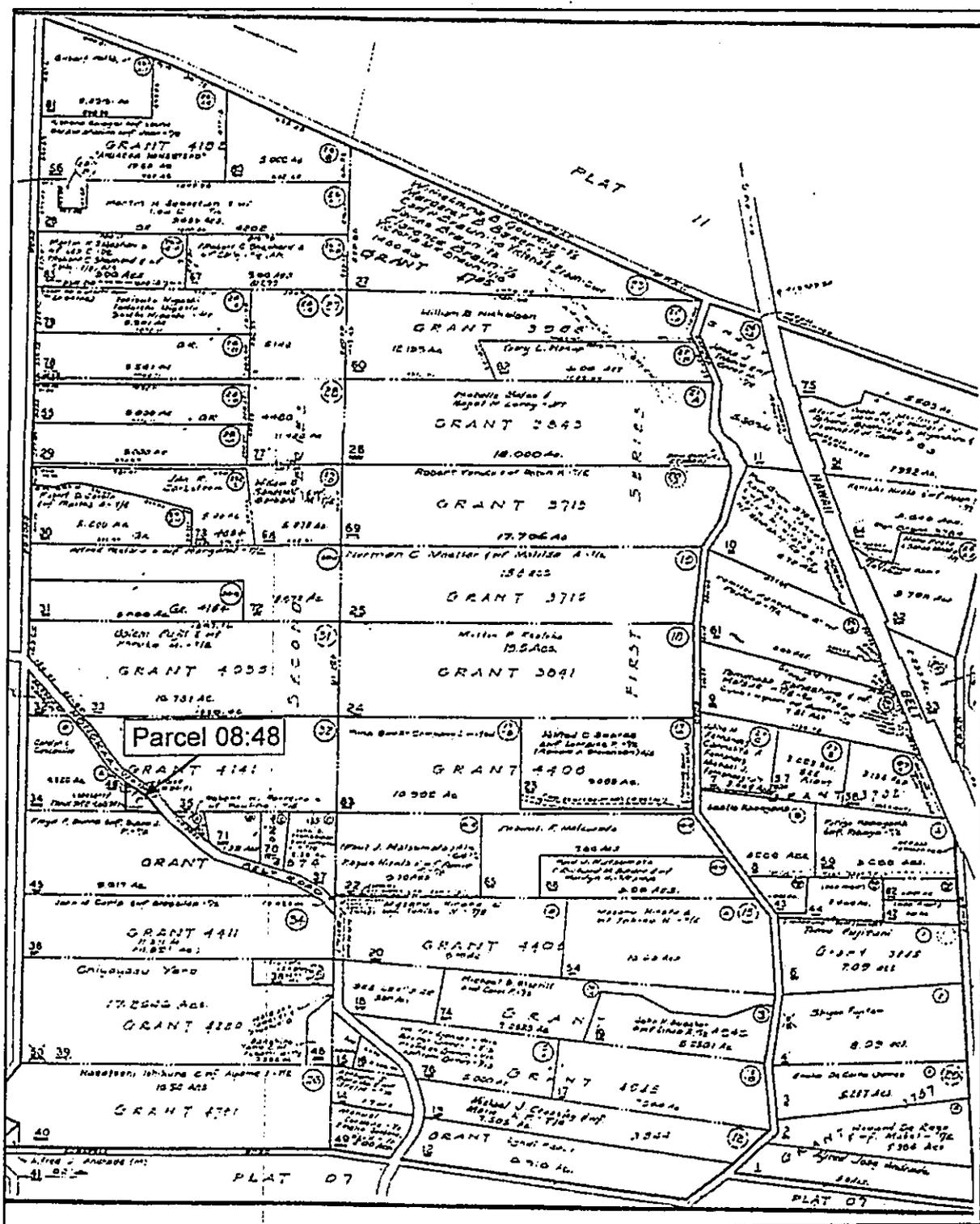
N ▲

Figure 1b Portion of TMK Map 4-6-07



Scale: 1:9,000 N

Figure 1c Portion of TMK Map 4-6-08



Scale: 1:9,000 N

Figure 1d Parcel 4-6-07:81 (Costa Site)

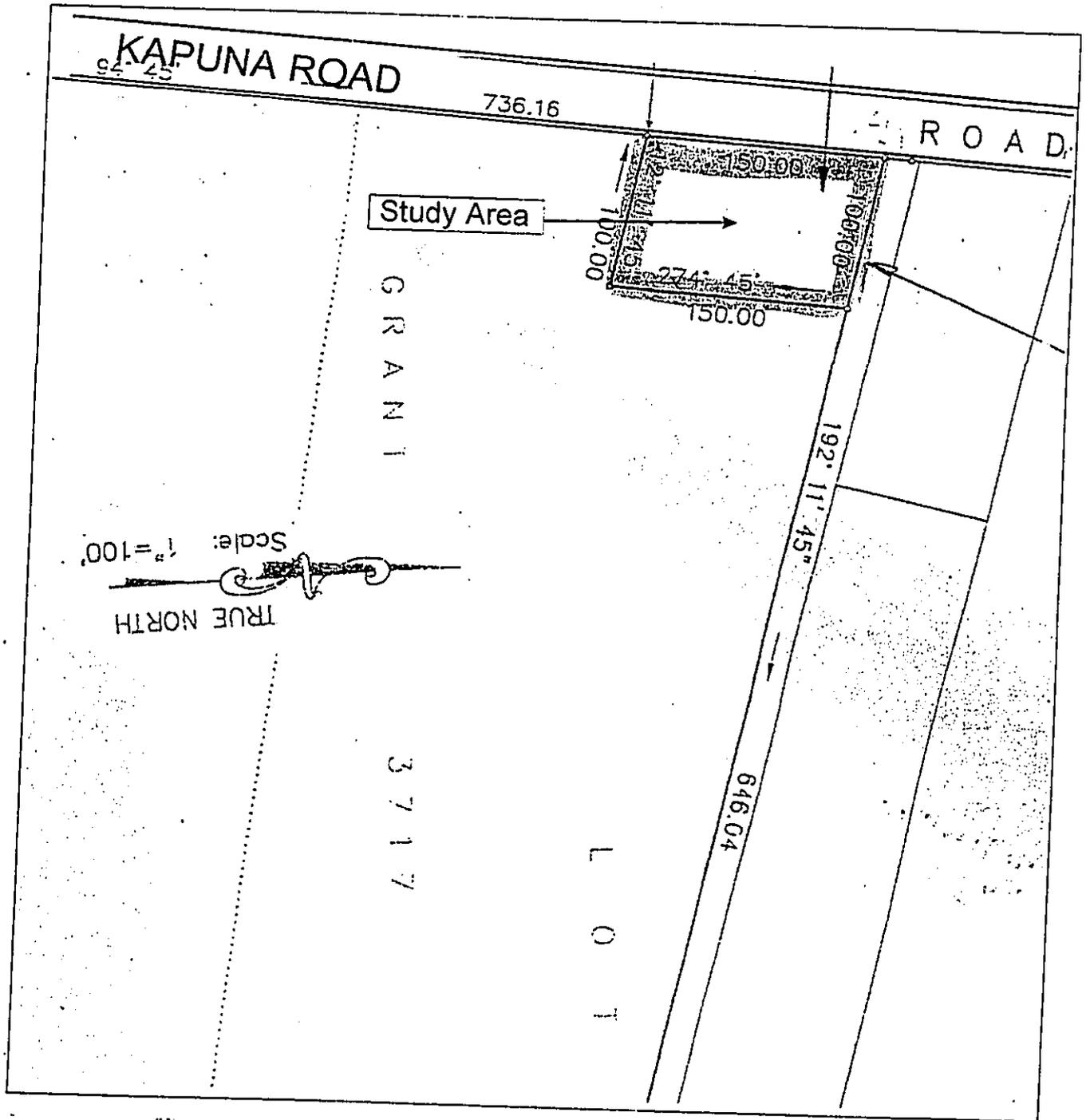


Figure 1e Parcel 4-6-08:48 (Sawmill Site)

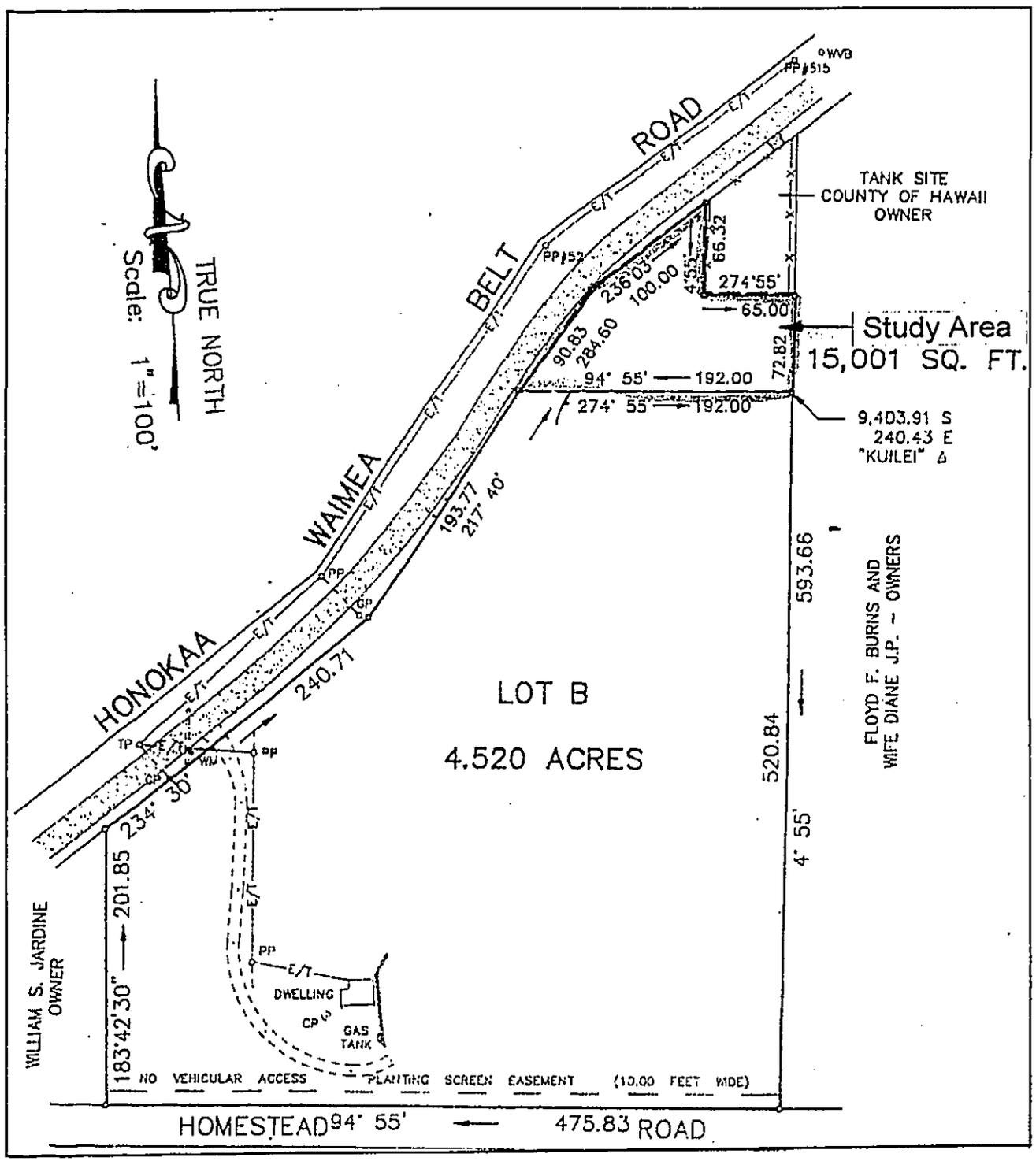


Figure 1e Parcel 4-6-08:48 (Sawmill Site)

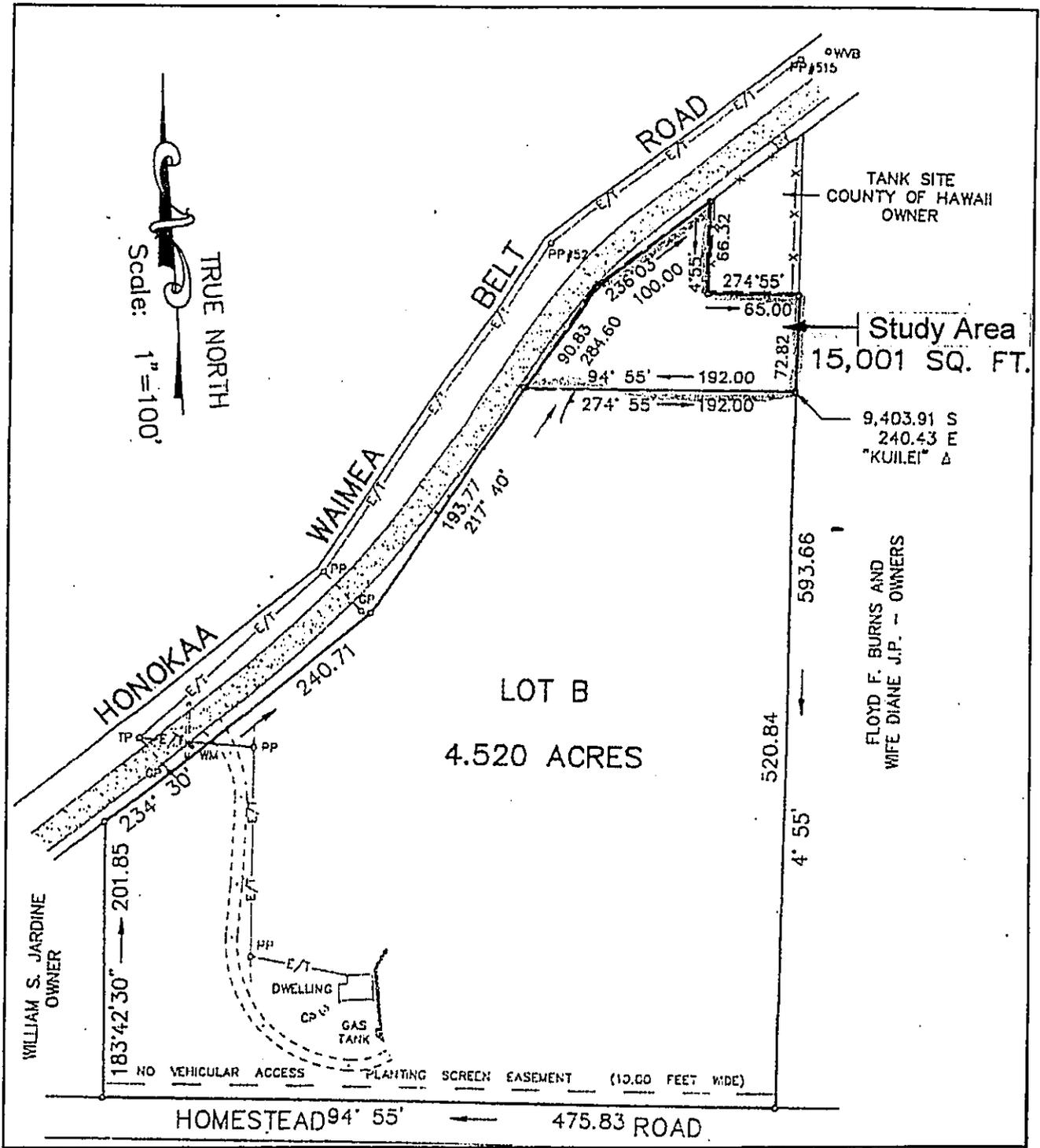


Figure 2a

Sawmill Site Plan

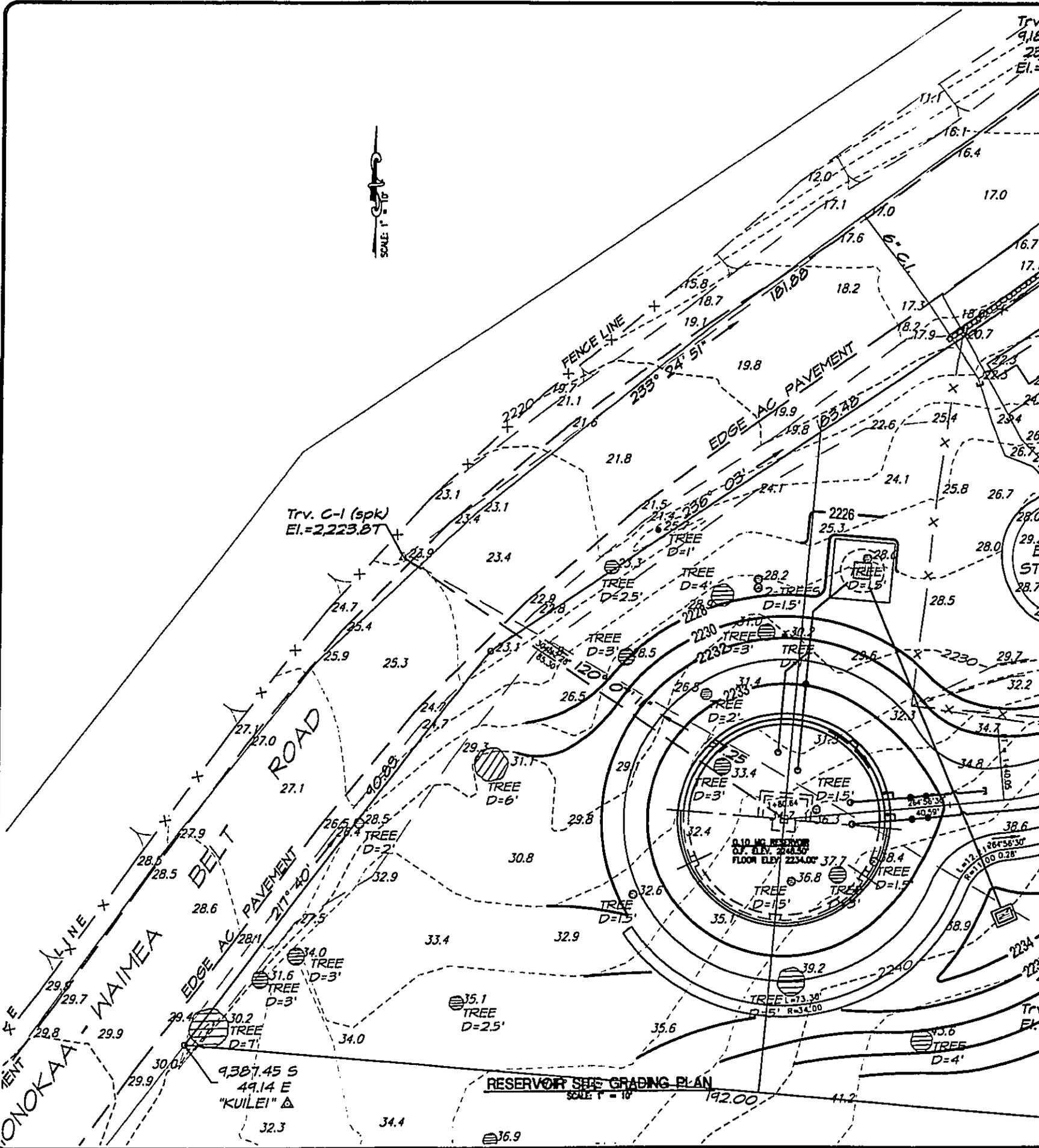


Figure 1e Parcel 4-6-08:48 (Sawmill Site)

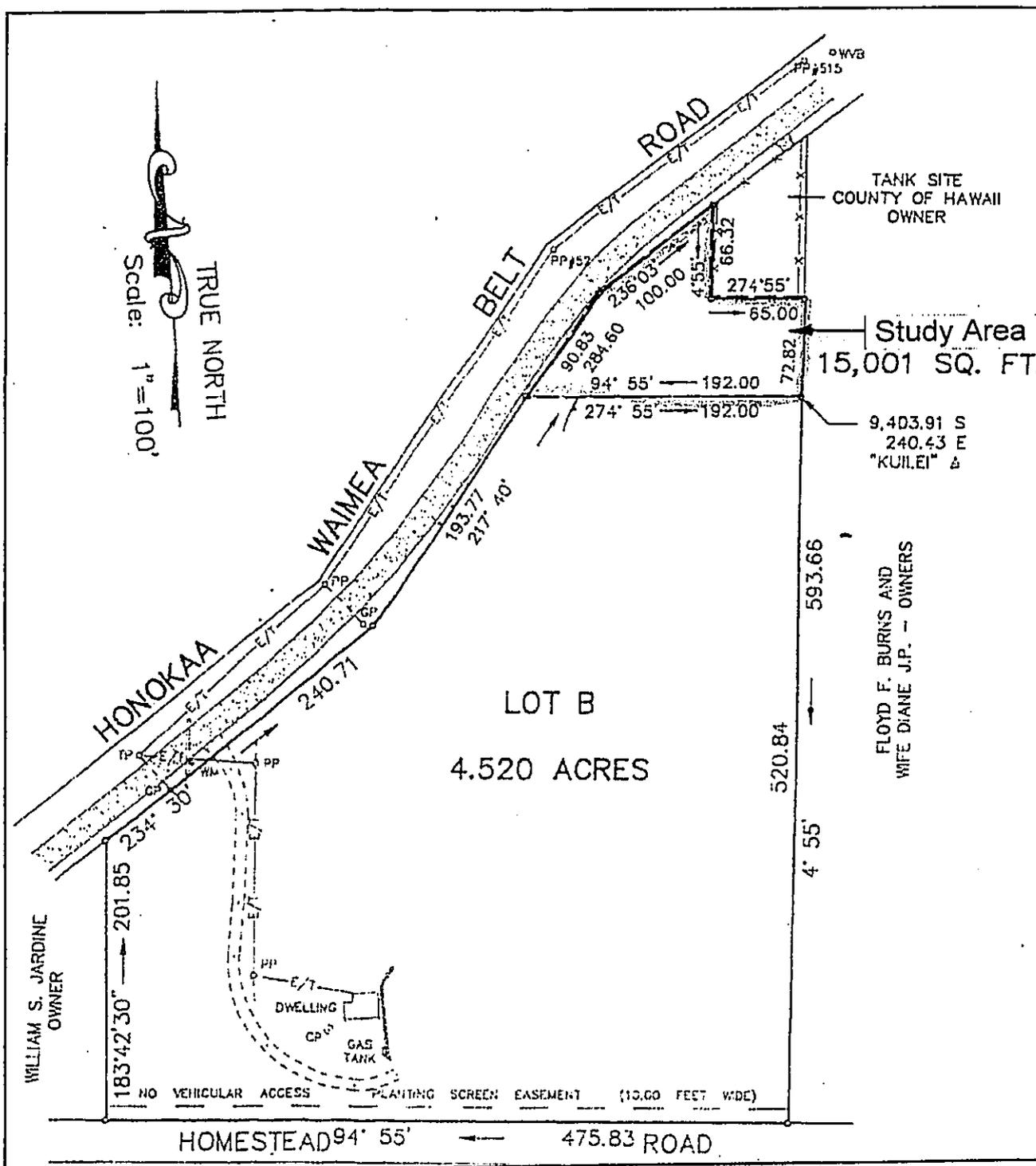
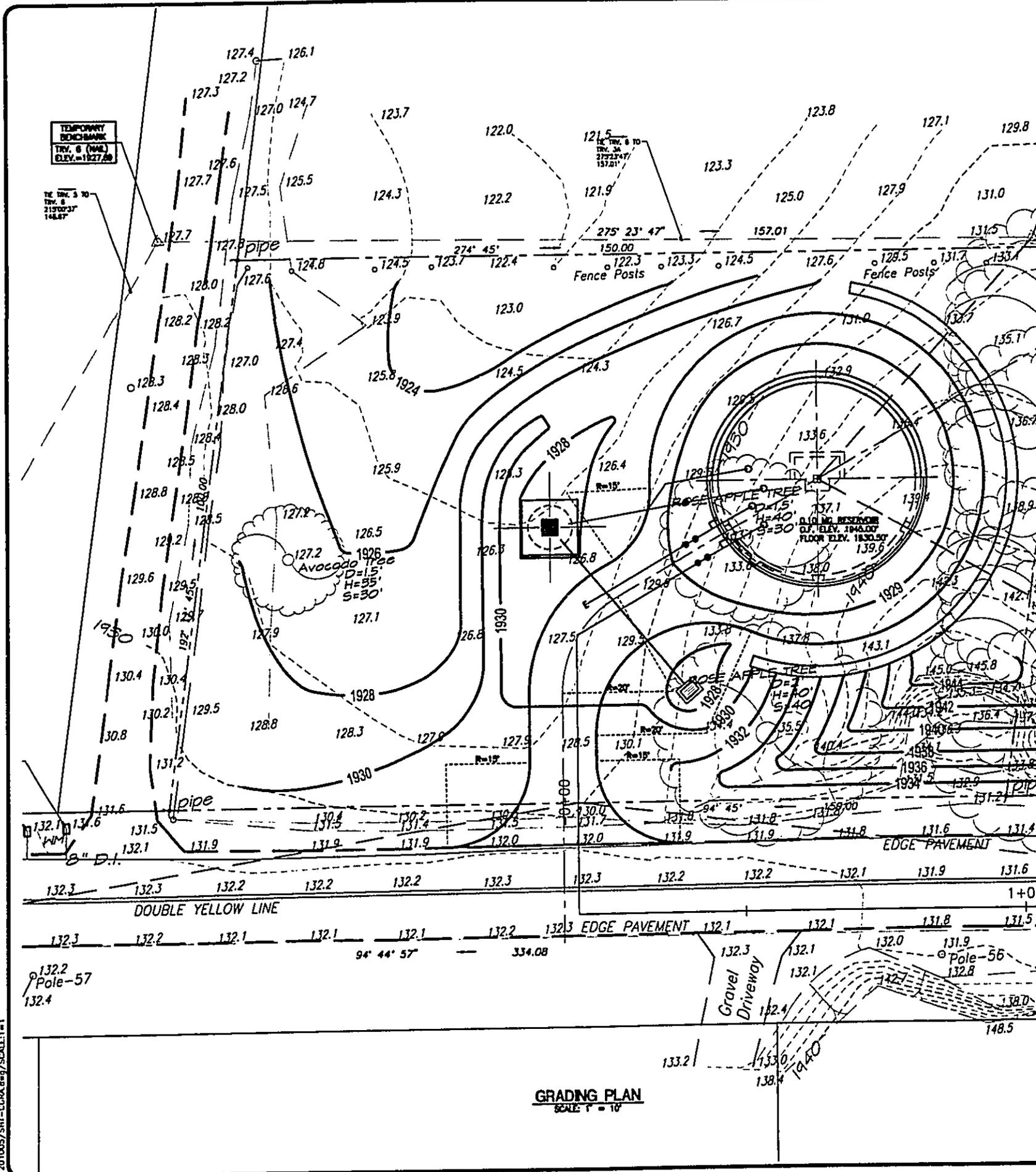


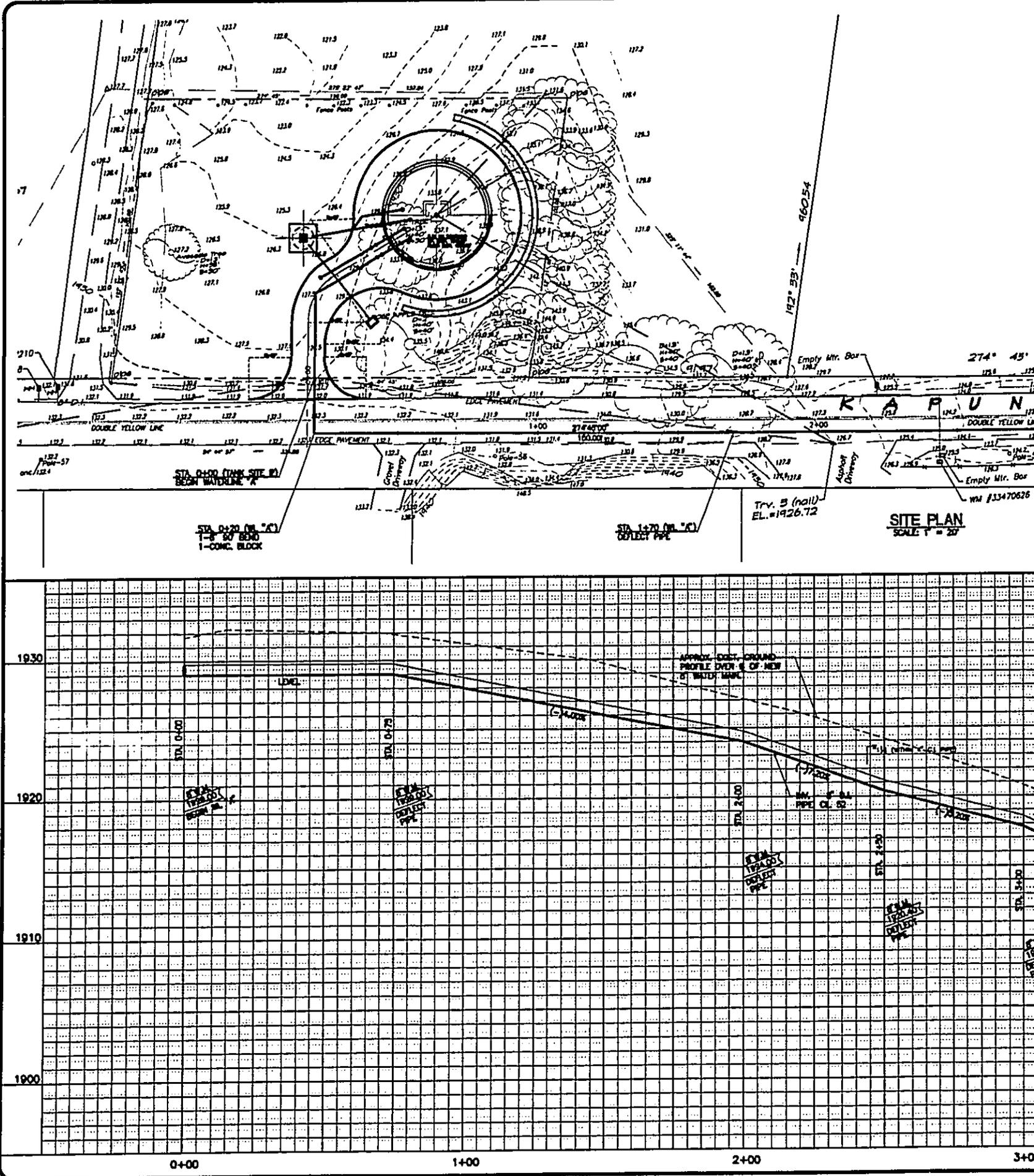
Figure 2b

Costa Site Plan

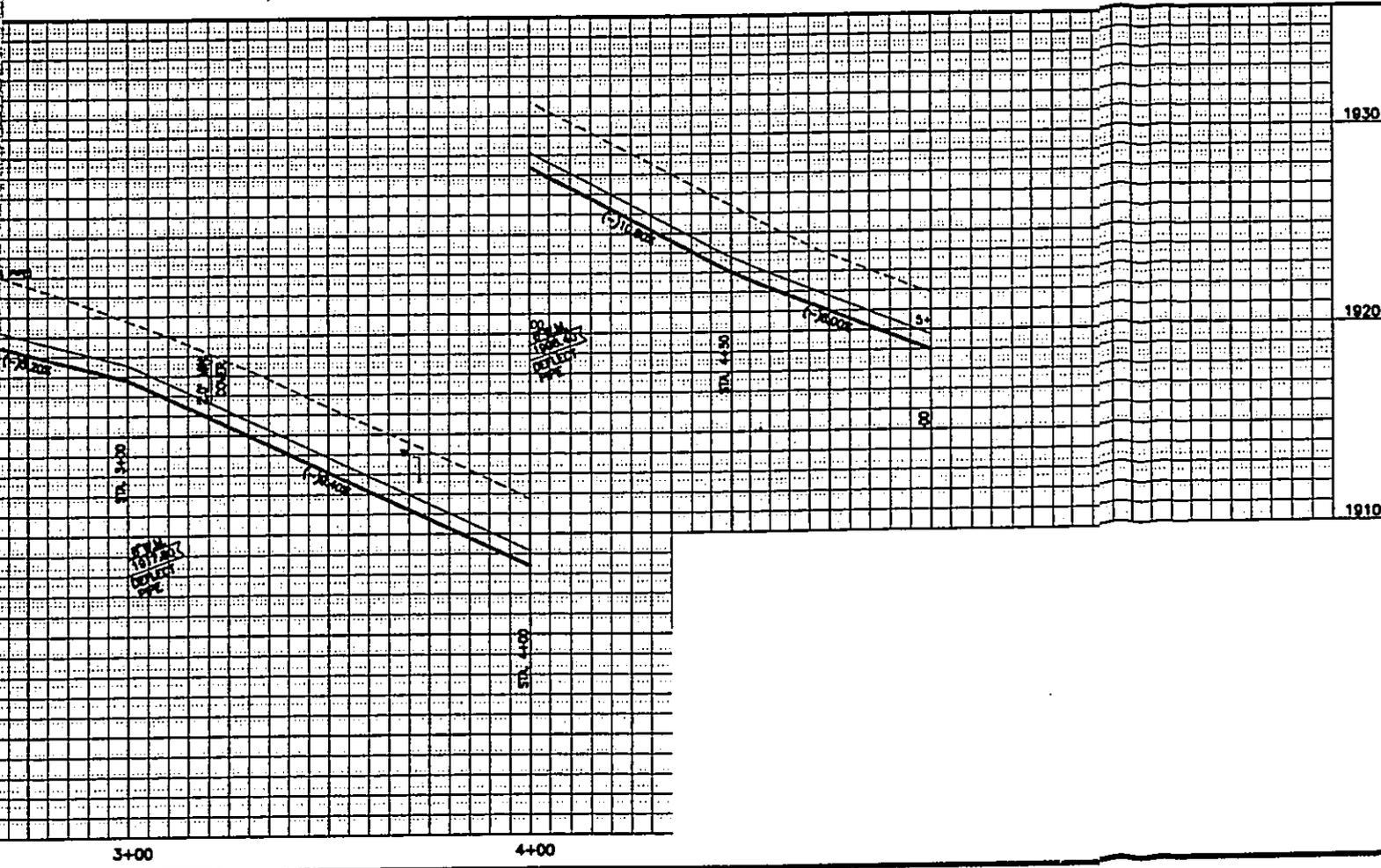
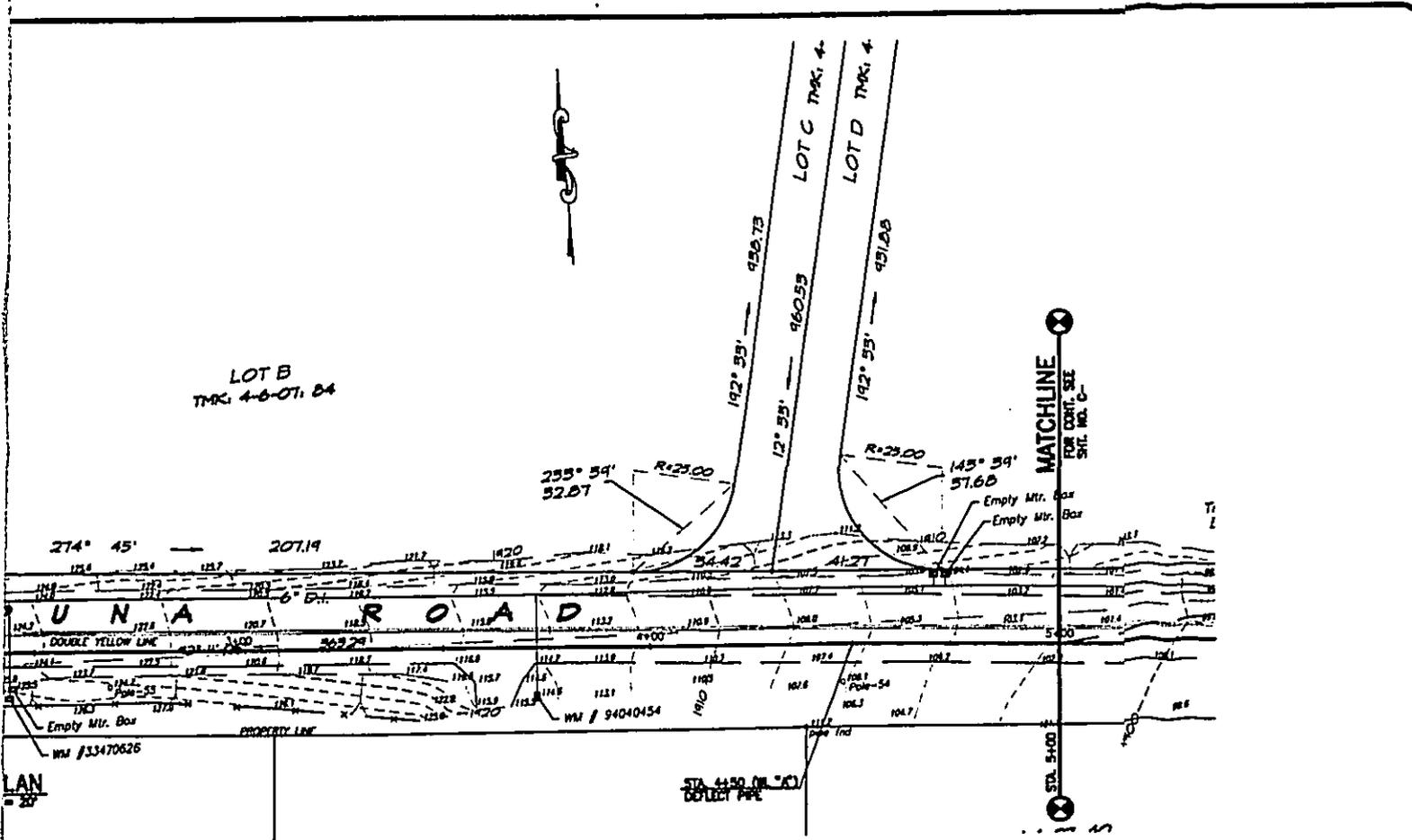


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Figure 2c Costa Site Pipeline Route (pt. 1)



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TMC: 4-6-07: 15

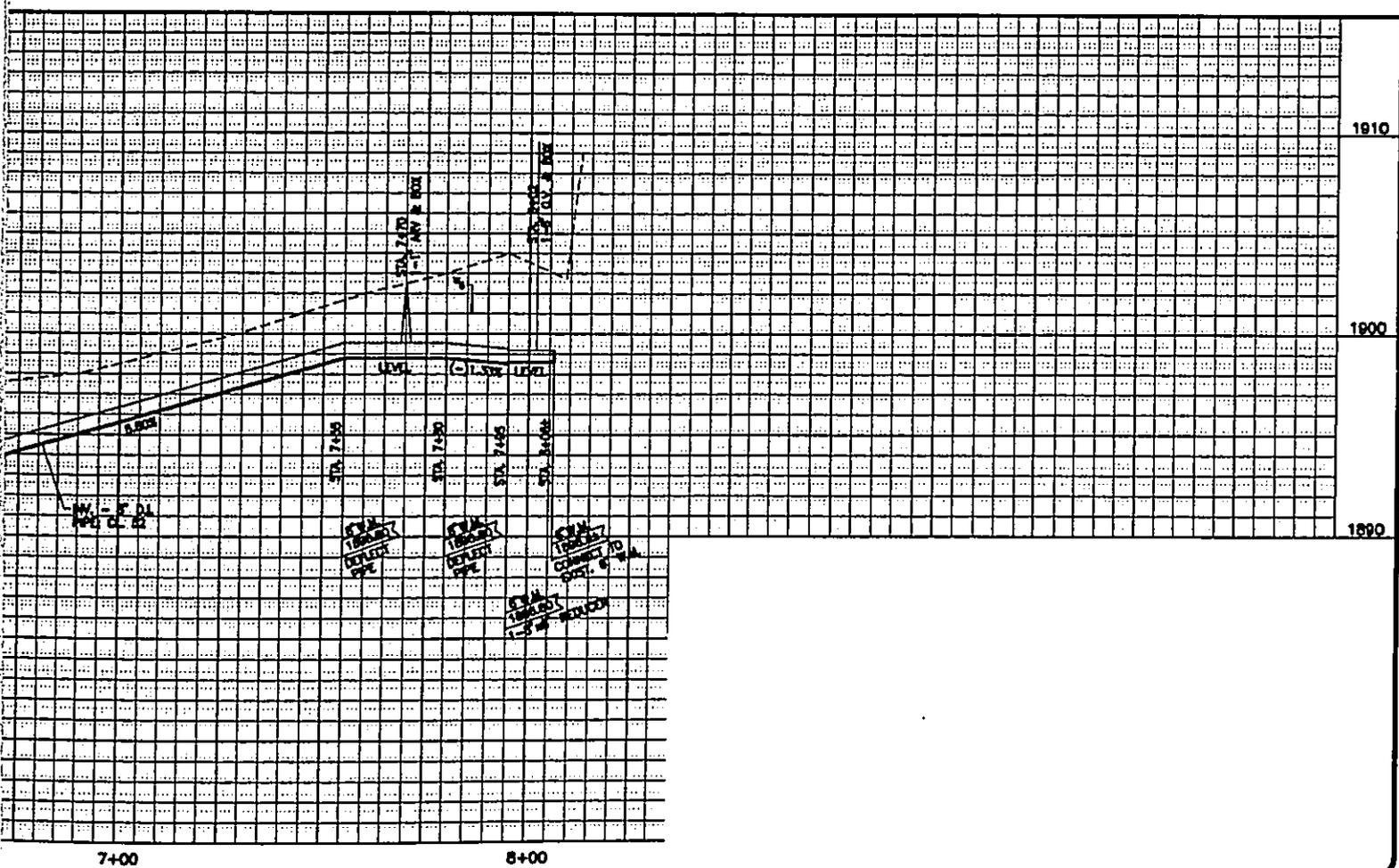
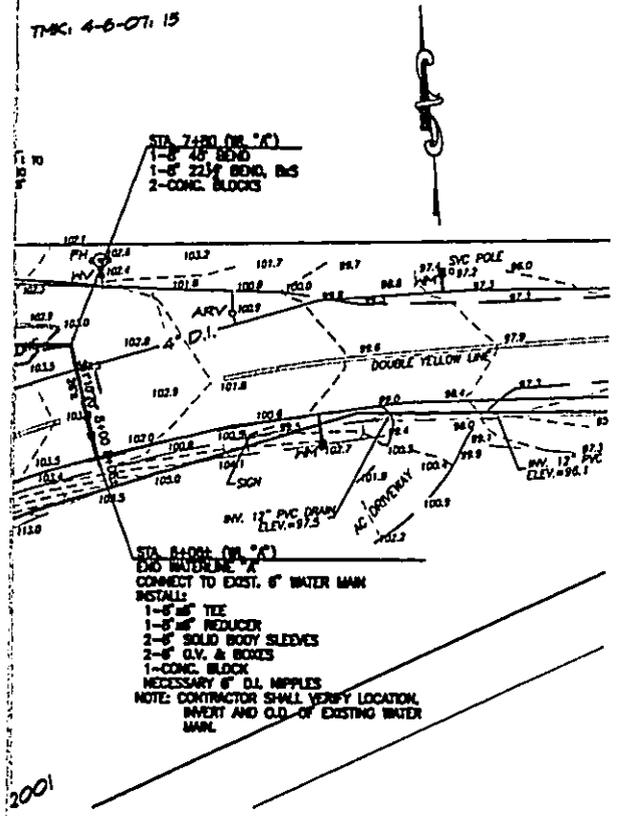
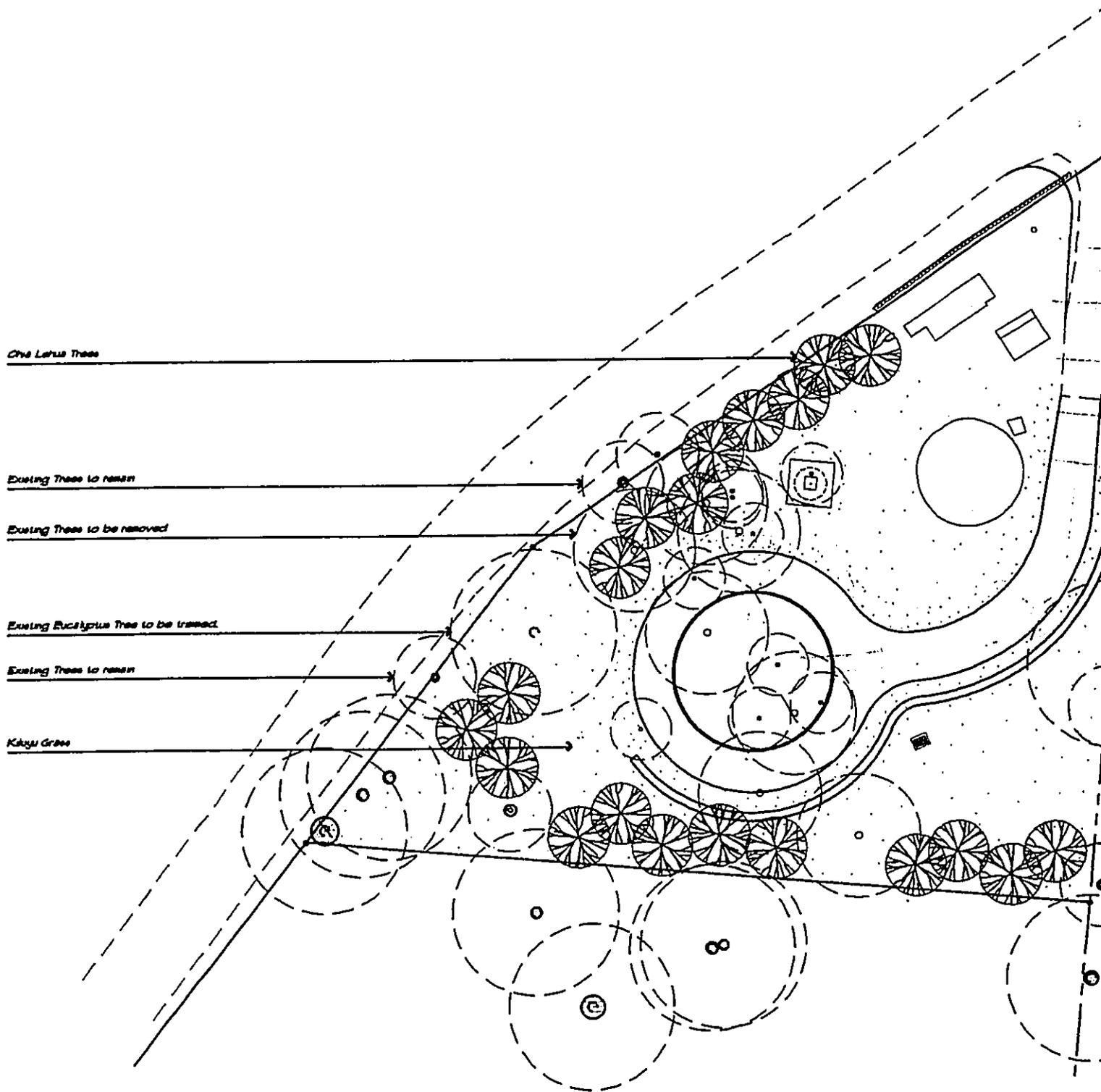


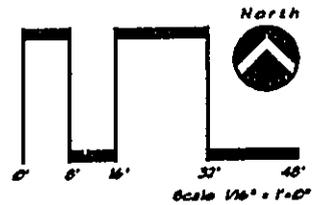
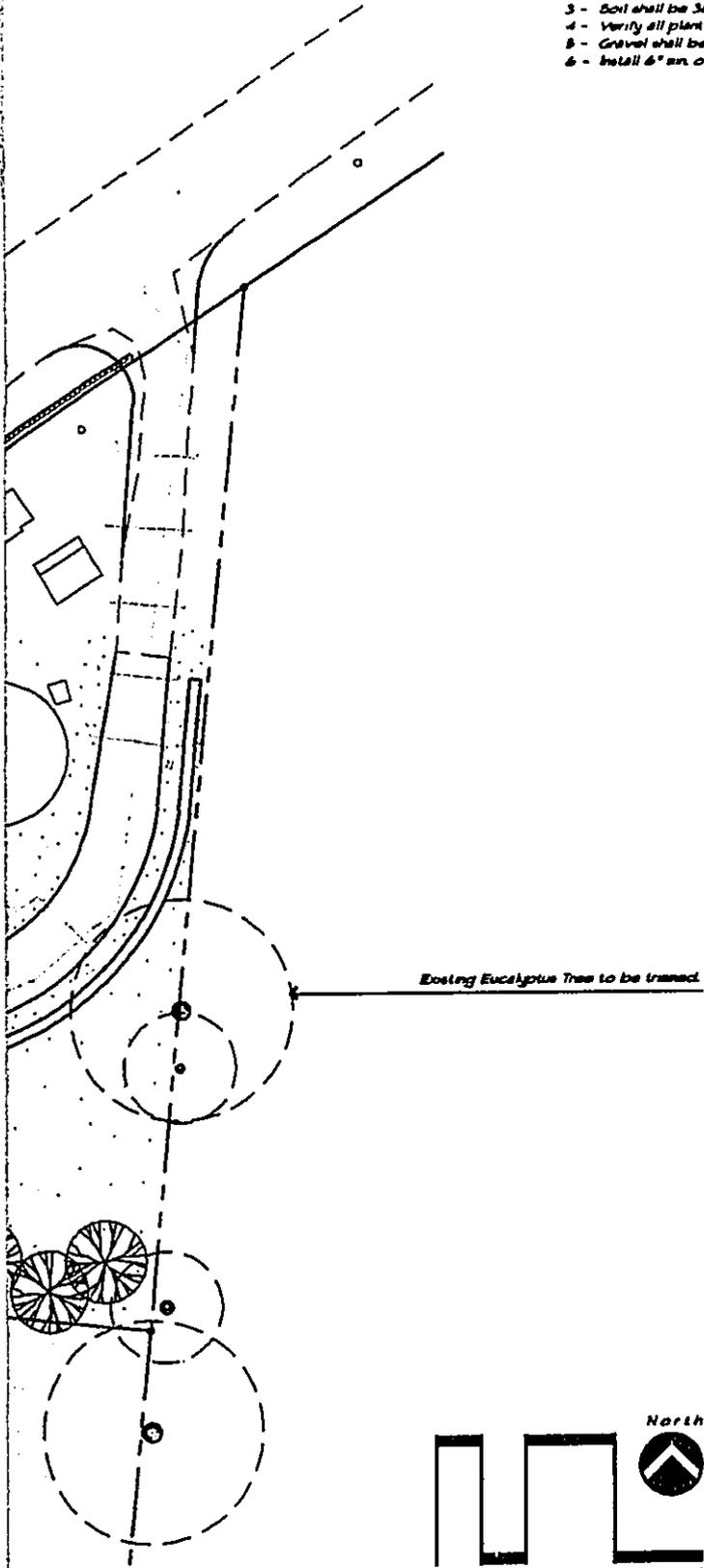
Figure 2e Landscaping Plan, Sawmill Site



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Landscape Notes

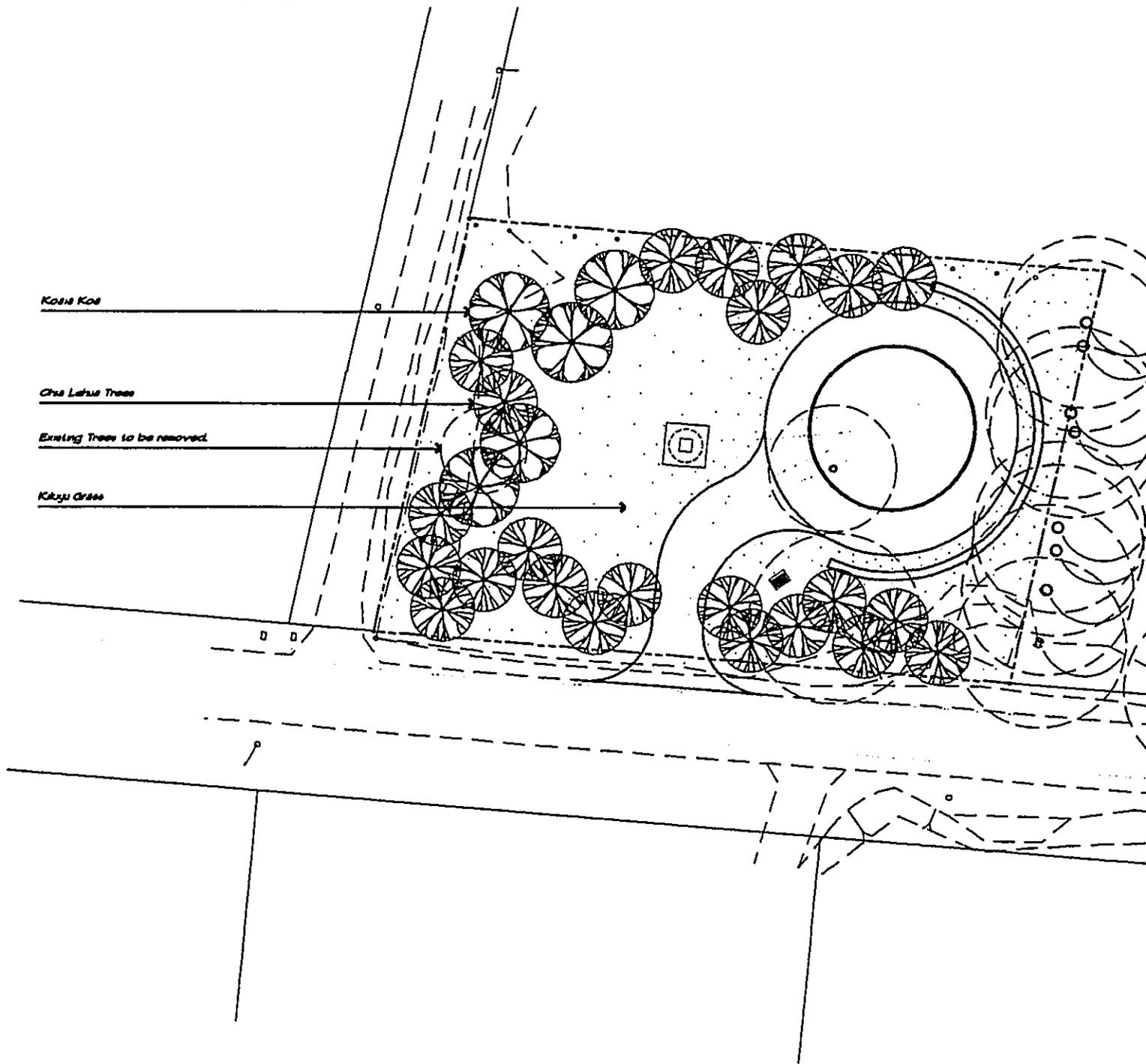
- 1 - Verify and be aware of all utilities during all phases of work. See civil, electrical, and mechanical drawings.
- 2 - Coordinate all work with the General Contractor.
- 3 - Soil shall be 30% black cinder, 40% soil, and 30% well aged macrot hum.
- 4 - Verify all plant materials with the Landscape Architect prior to purchasing.
- 5 - Gravel shall be 3/4" dia, no fines, 3" layer. Verify gravel with the Landscape Architect prior to purchasing.
- 6 - Install 6" min. of top soil over all planting areas.



	DEPARTMENT OF WATER SUPPLY COUNTY OF HAWAII	
	PROJECT: AHUALOA NOS. 1 & 2, 0.10 MG RESERVOIRS	SHEET NO. OF SHEETS
This work was prepared by me or under my supervision.		
JOB NO. 2000-766 PART 1		

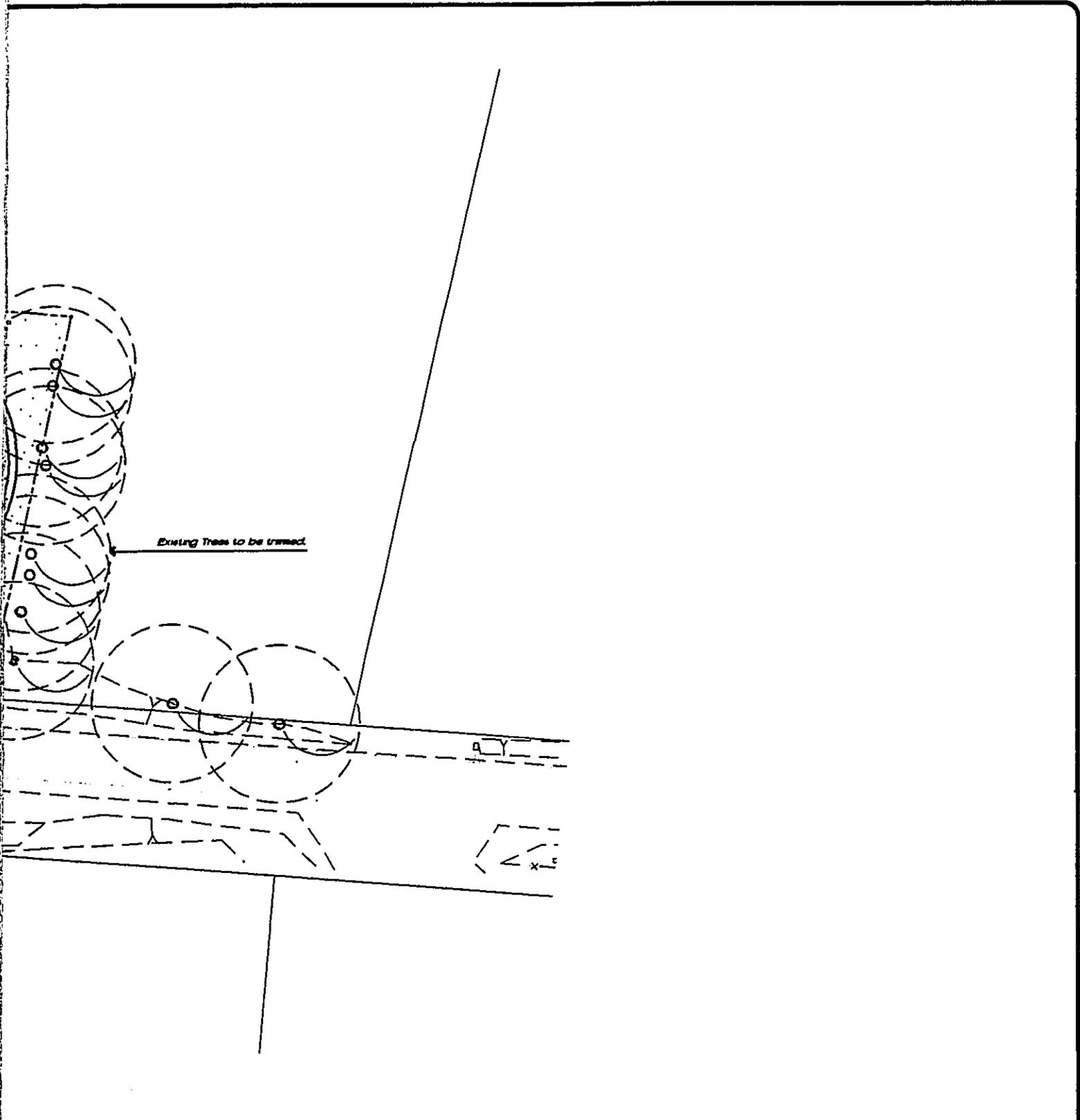
Figure 2f

Landscaping Plan, Costa Site

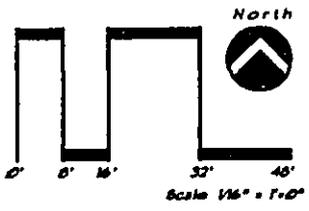


Landscape Notes

- 1 - Verify and be aware of all utilities during all phases of work. See civil, electrical, and mechanical drawings.
- 2 - Coordinate all work with the General Contractor.
- 3 - Soil shall be 30% black cinder, 40% soil, and 30% well aged manure husk.
- 4 - Verify all plant materials with the Landscape Architect prior to purchasing.
- 5 - Gravel shall be 3/4" dia, no fines, 3" layer. Verify gravel with the Landscape Architect prior to purchasing.
- 6 - Install 6" min. of top soil over all planting areas.



mechanical change.
prior to purchasing.



This work was prepared by me or under my supervision.



DEPARTMENT OF WATER SUPPLY
COUNTY OF HAWAII

PROJECT: AHUALOA NOS. 1 & 2,
0.10 MG RESERVOIRS

JOB NO. 2000-768 PART 1

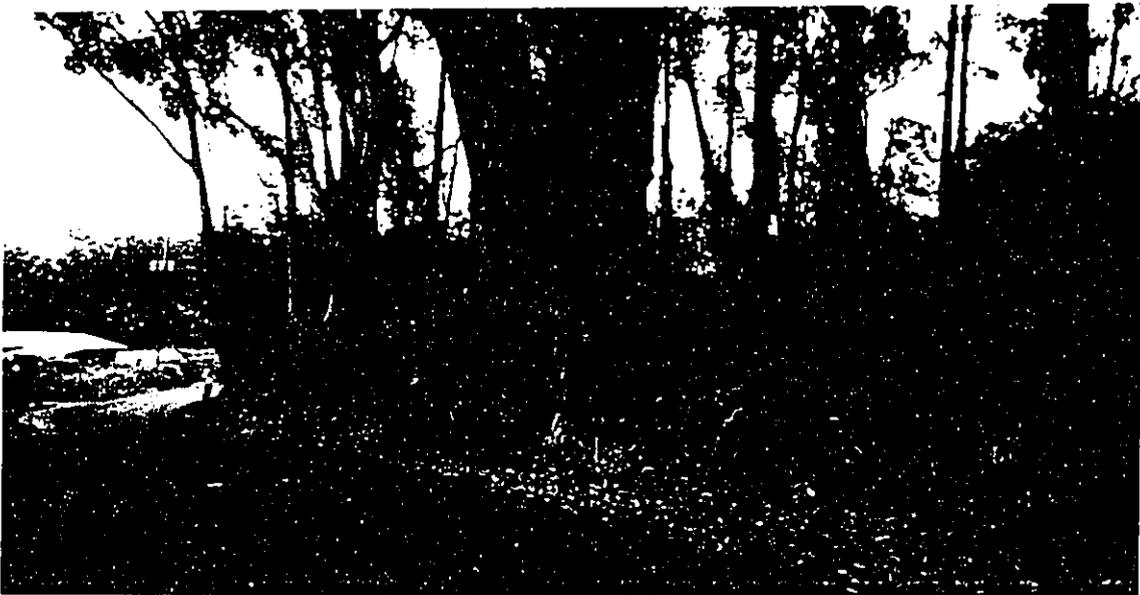
SHEET NO.
OF SHEETS

Figure 3

Photographs of Sawmill and Costa Sites



Existing
Sawmill
Water Tank



Site for New
Sawmill
Water Tank



Costa
Water Tank
Site

APPENDIX 2

ARCHAEOLOGICAL AND CULTURAL ASSESSMENT

Bob Rechtman

808 966-7636

p. 1

BENJAMIN J. CAYETANO
GOVERNOR OF HAWAII



GILBERT COLOMA-AGARAN, CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES

DEPUTIES
ERIC T. HIRANO
LINNEL NISHIOKA

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE HISTORIC PRESERVATION DIVISION
801 KAMOKILA BLVD., ROOM 666
KAPOLEI, HAWAII 96707

AQUACULTURE DEVELOPMENT
PROGRAM
AQUATIC RESOURCES
CONSERVATION AND
ENVIRONMENTAL AFFAIRS
CONSERVATION AND
RESOURCES ENFORCEMENT
CONVEYANCES
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
DIVISION
LAND MANAGEMENT
STATE PARKS
WATER AND LAND DEVELOPMENT

February 13, 2002

Dr. Bob Rechtman
Rechtman Consulting
HC1, Box 4149
Kea'au, Hawaii 96749

LOG NO: 29189 ✓
DOC NO: 0202PM18

Dear Dr. Rechtman:

SUBJECT: Letter Report on Archaeological Survey and Limited Cultural Assessment of Two Proposed Water Tank Locations, Ahualoa Homesteads (Rechtman, 2001), Ahualoa, Hamakua, Hawaii Island
TMK: (3) 4-6-07:81 and 4-6-08:48

Thank you for your letter of February 6, 2002, with a copy of a September 13, 2001 letter report (RC-0081) on an archaeological survey and limited cultural assessment study for two proposed County of Hawaii water tanks at the above referenced locations. We appreciate the opportunity to review and comment on your report, which will be summarized in an Environmental Assessment that is being prepared by Ron Terry.

Few or no historic sites were expected at the two water tank locations because of the history of past land use, which included sugar cane cultivation. Your report indicates that no historic sites were found in the archaeological survey. The probability of traditional cultural properties and practices seems remote for the same reasons. Based on the information provided in your report we believe that no historic properties will be affected by the proposed project.

The information presented in your report is adequate for an assessment study. However, these documents should be submitted to us in report format, not letter format. In the future, please do so. For this report, we do need a title page, however. Please prepare one and mail it to us. A copy of the report (with the title page) should also be sent to Marc Smith for our Hilo office library.

Aloha,


DON HIBBARD, Administrator
State Historic Preservation Division

PM:amk

RECHTMAN CONSULTING
HC 1 Box 4149 • Kea'au, Hawai'i 96749
phone: (808) 966-7636 • (808) 966-6235
toll free fax: (800) 406-2665 • e-mail: brechtman@aol.com

September 13, 2001

RC-0081

Ron Terry, Ph.D.
Geometrician
HCR 2 Box 9575
Kea'au, HI 96749

Dear Ron:

At your request, on behalf of the Hawai'i County Department of Water Supply, Rechtman Consulting conducted an archaeological survey and limited cultural assessment of a development area associated with the placement of water tanks at two locations in the Āhualoa Homesteads portion of Hāmākua, Island of Hawai'i (Figure 1). This archaeological and cultural study is intended to accompany an *Environmental Assessment* being prepared in compliance with HRS 343. The study area consists of portions of two parcels (TMK:3-4-6-07:81 and 3-4-6-08:48) (Figures 2 and 3). The Parcel 08:48 site is for the development of a new water tank on a roughly 15,000 square foot portion of the parcel located along the Honoka'a-Waimea Belt Road (Figure 4). The Parcel 07:81 site is also for the placement of a water tank on a roughly 15,000 square foot property located along Kapuna Road (also known as Āhualoa School Road; Figure 5).

Parcel 07:81 is a portion of a larger property (Grant 3717) given as part of the first series of grants in the Āhualoa Homesteads area. Parcel 08:34 is a portion of former Grant 4141 given during the second series of grants. The grant program in Āhualoa commenced in 1889 and encompassed the area between present-day Māmalahoa Highway (*makai* boundary) and the Āhualoa Forest Reserve (*mauka* boundary). The area appears to have been converted to homesteads from sugarcane land; the upper Hāmākua Ditch runs near the upper limits of the Homestead border and the Lower Hāmākua Ditch runs below Honoka'a Town well *makai* of the present study area. The traditional *ahupua'a* within which the study parcels lie is unclear. This portion of the Homesteads appears to have been carved out of the upper reaches of at least four *ahupua'a*: Lauka, Kuliha'i, Koloaha, and Āhualoa. These are all relatively narrow and short land units being cut off on their *mauka* sides by Nienie Ahupua'a, which in turn is cut off by Pā'auhau Ahupua'a (Figure 6). Alternatively, Āhualoa Ahupua'a, which was retained as Government Land during the *Mahele*, may have originally cut off Lauka, Kuliha'i, and Koloaha, before itself being cut off by Nienie. Collectively, very few *kuleana* awards were made in these *ahupua'a*, and all were well *makai* of the current study area.

Cordy (1994) documents land use pattern gleaned from the *Mahele* records in his regional synthesis of Hāmākua, and discusses this area in generalities derived from a detailed examination of archival information relative to historic land use in Neinei Ahupua'a (immediately to the south). House sites tended to be near the coast and extended to just *makai* of the cross-island trail (present day Māmalahoa Highway). Garden plots (*mala kihapai*, and *kula*), which were non-irrigated, tended to be located in proximity to the houselots, with some scattered field in the *mauka* regions. Taro was the dominant crop with sweet potato, banana, *wauke*, oranges, and 'ōhi'a also cultivated.

At an elevation of roughly 1900 feet, the current study area is situated near the boundary of the Seaward Upper Slopes and the 'Ōhi'a-Koa Forest Zone (Cordy 1994:61-2). It is likely that during precontact times the general study area supported a forest canopy perhaps interrupted in areas by long linear dryland taro fields. The forest zone in Hāmākua was traditionally a location for the collection of

bark for both the making of fish nets and cloth (*mamāki* and *wauke*), bird catching for feathers, and timber harvesting for canoes (Cordy 1984). Natural features such as caves, and temporary open air shelter constructions were no doubt used as short-term habitations during resource extraction expeditions. Access to the upper forest areas was most surely along repeatedly used trails, which may have left their mark on the landscape.

However, given the nature of the past land use in the area, sugarcane cultivation in the middle to late nineteenth century and Homestead Grants with commensurate intensive residential and agricultural use starting as early as 1889, it is likely that the study parcels are not in an area that was traditionally used for resource extraction or other cultural practices for at least 130 years.

On June 16, 2001, Robert B. Rechtman, Ph.D. performed a field survey of both parcels within the study area, the limits of which were pointed out in the field by Dr. Ron Terry, and which were marked by surveyor's stakes. Both parcels were subject to an intensive and comprehensive reconnaissance of their entire ground surfaces; ground visibility was excellent. The vegetation on both parcels was predominantly introduced species, although of a different nature for each parcel. On Parcel 07:81 ornamental and landscaping plants were common (i.e., Formosa koa [*Acacia confusa*], yellow ginger [*Hedychium flavescens*], impatiens [*Impatiens wallerana*], macadamia nut [*Macadamia integrifolia*], Broad-leaved plantain [*Plantago major*], guava [*Psidium guajava*], Mexican elder [*Sambucus mexicana*], Rose apple [*Syzygium jambos*] wedelia [*Wedelia trilobata*]). On Parcel 08:48 the ground cover was predominantly grasses and weeds (e.g., hairy cat's-ear [*Hypochoeris radicata*], elephant grass [*Pennisetum purpureum*], Glenwood grass [*Sacciolepis indica*], vervain [*Stachytarpheta jamaicensis*]) with an over story of introduced trees (e.g., ironwood [*Casuarina equisetifolia*], eucalyptus [*Eucalyptus sp.*], guava [*Psidium guajava*]). The project area soil is characterized as Honoka'a silty clay loam [HTD] (Sato et al. 1973). No archaeological resources were observed on either parcel. Also, no resources of a potential traditional cultural nature (i.e., landform, vegetation, etc.) were observed.

It is concluded that development of the water tank facilities will not adversely affect any historic or traditional cultural properties. Because of the recorded time depth of potential land-altering activities in the general study area, it is also logical to conclude that the proposed construction will not impact any culturally valued resources or cultural practices. Accordingly, it is recommended that DLNR-SHPD require no further historic preservation work prior to construction. However, in the highly unlikely event that archaeological resources are encountered during land-altering activities associated with the placement of the water tanks, work in the immediate area of the discovery should be halted and DLNR-SHPD contacted as outlined in draft Hawai'i Administrative Rules 13§13-280.

Sincerely:



Bob Rechtman, Ph.D.
Principal Archaeologist

References Cited

- Cordy, R.
1994 *A Regional Synthesis of Hāmākua District, Island of Hawai'i*. Historic Preservation Division
Department of Land and Natural Resources, State of Hawai'i.
- Sato, H., W. Ikeda, R. Paeth, R. Smythe, and M. Takehiro, Jr.
1973 *Soil Survey of Island of Hawai'i, State of Hawai'i*. US DoA, Soil Conservation Service.

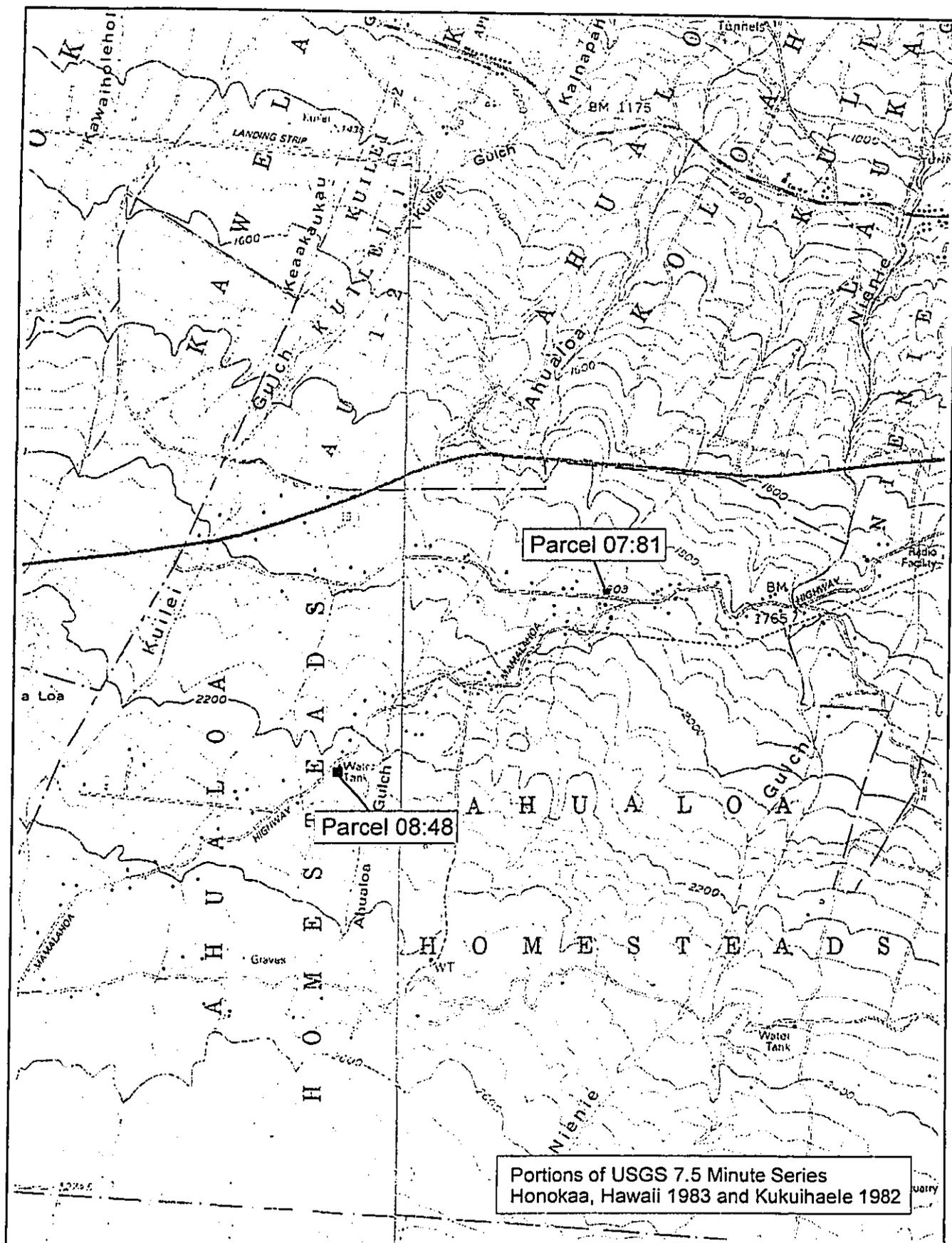


Figure 1. Project area location.

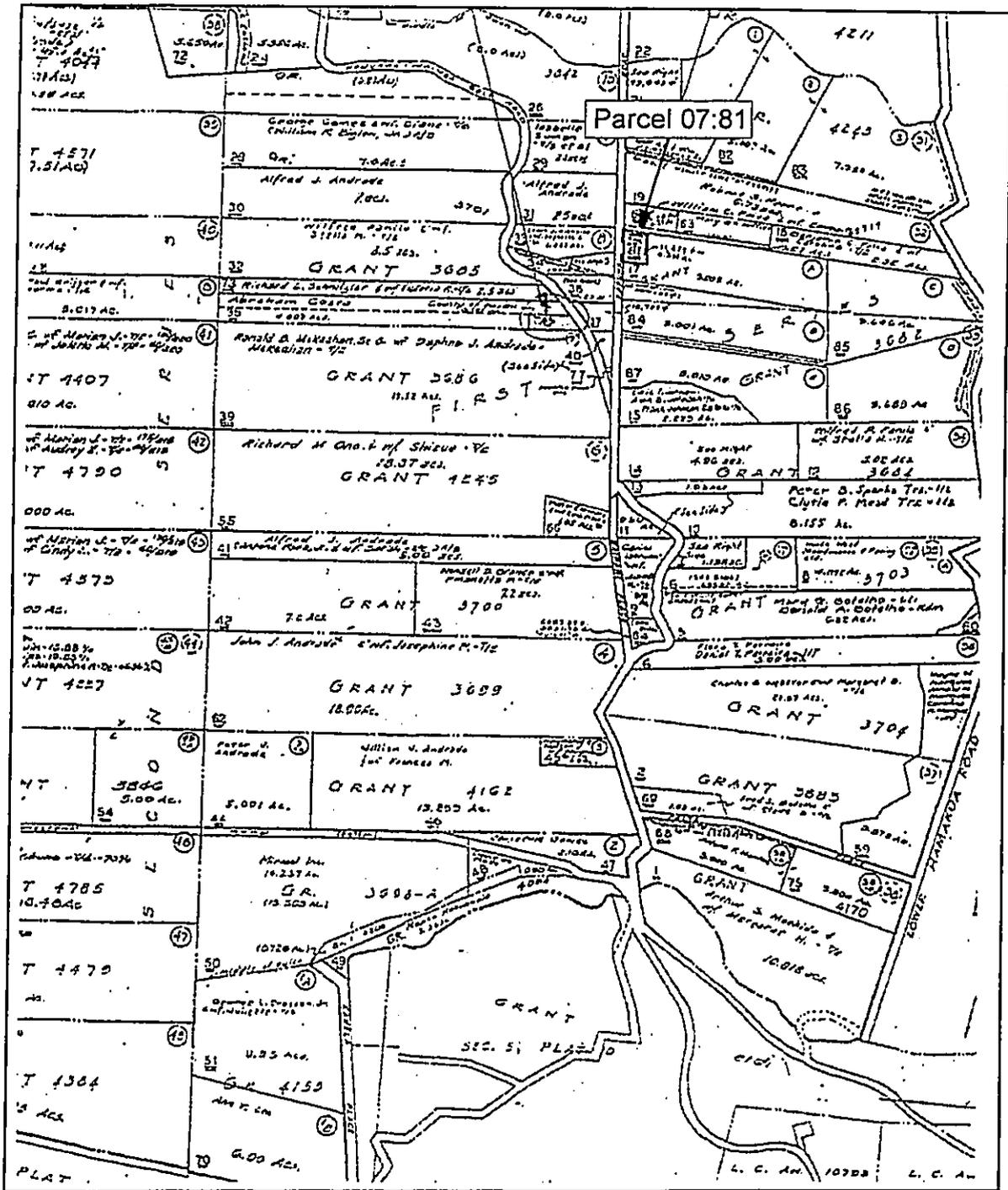


Figure 2. Portion of TMK map 4-6-07.

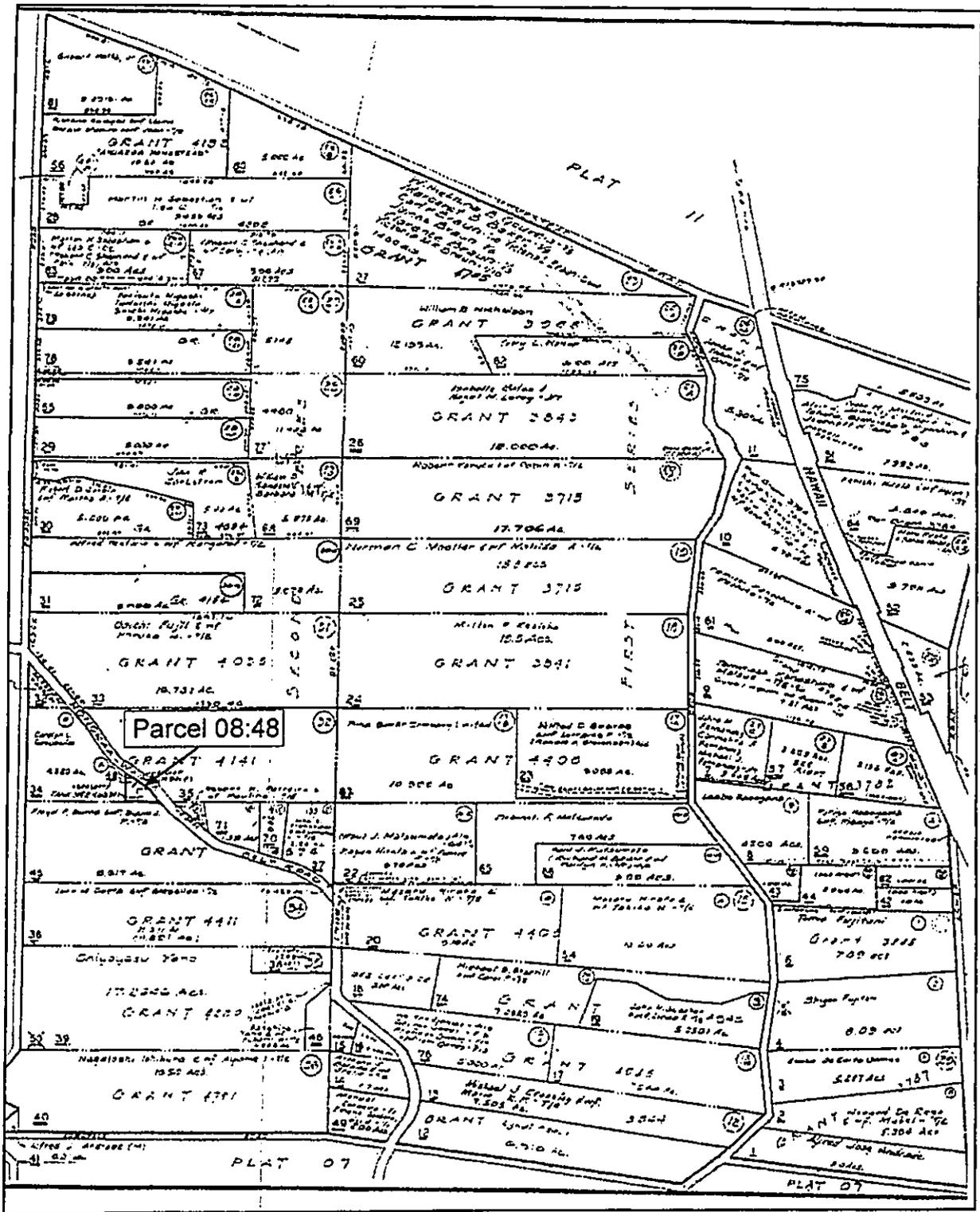


Figure 3. Portion of TMK map 4-6-08.

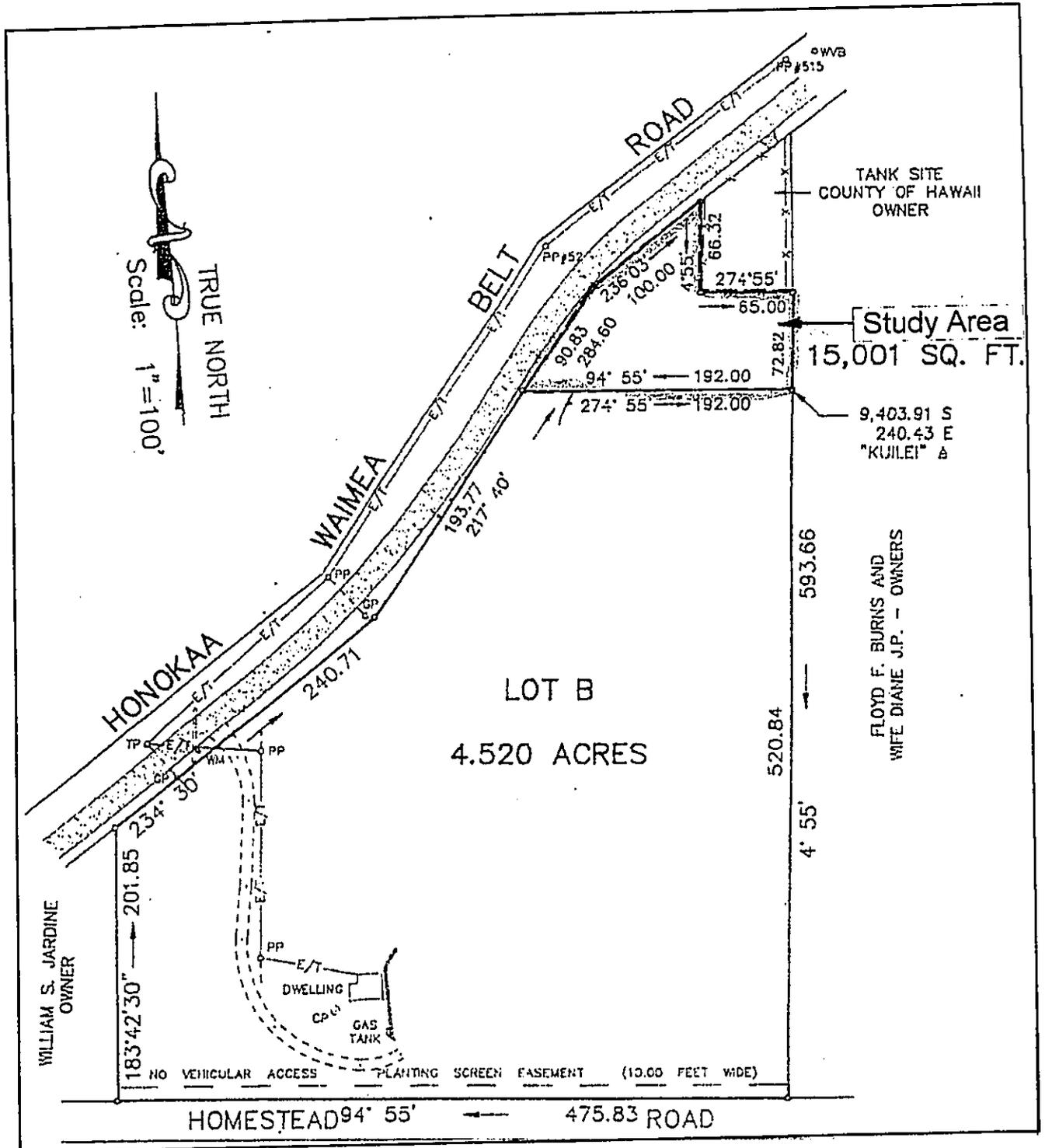


Figure 4. Parcel 08:48 study area.

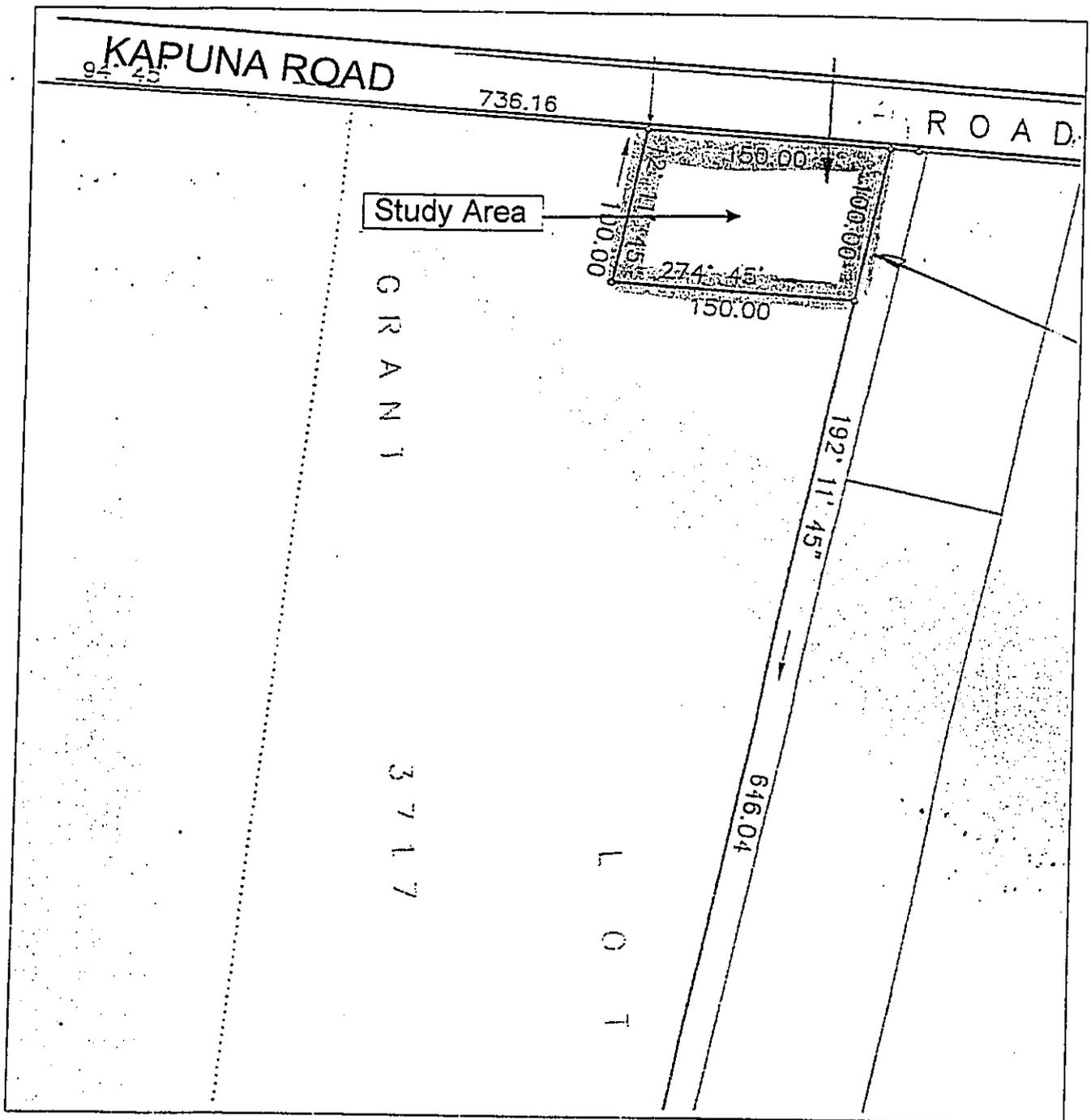


Figure 5. Parcel 07:81 study area.

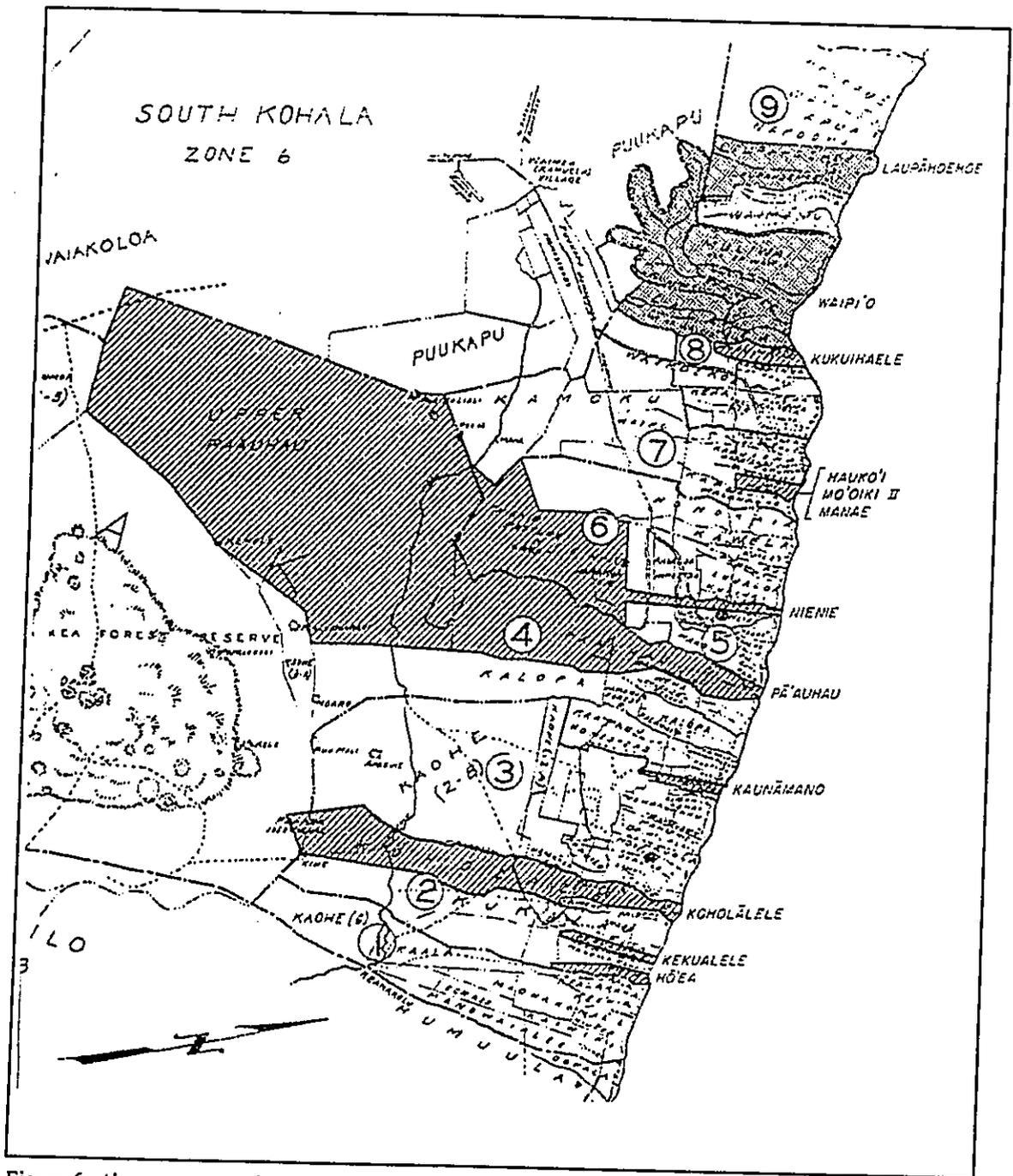


Figure 6. Ahupua'a map (from Cordy 1994:20).

APPENDIX 3

LEAD PAINT/PIPE REPORT



MURANAKA
ENVIRONMENTAL CONSULTANTS, INC.
P.O. Box 4341 • Honolulu, Hawaii 96812

November 7, 2001

Okahara & Associates, Inc.
200 Kohola Street
Hilo, HI 96720

Attn: Terry Nago
Re: Ahualoa Nos. 1 & 2 0.10 MG Reservoirs

This letter constitutes Muranaka Environmental Consultants, Inc.'s (MEC) final report for the survey conducted at the Sawmill and Costa reservoirs, located in Hilo, Hawaii. The purpose of the survey was to determine the location of lead-containing paint on the reservoirs and above ground pipes prior to the demolition project. MEC's on-site inspector was Mark T. Muranaka, (Lead Inspector/Risk Assessor certification number I-1958, expiration 11/15/02).

On October 26, 2001, MEC collected 18 samples of suspect LCP for lead analysis. Four to six square inches of paint was scraped from each specified area, down to the structural substrate. The inspector noted the colors of the various layers of paint. Each sample was placed into a labeled, re-sealable plastic bag.

The paint samples were sent to Scientific Laboratories of California, Inc. for analyses. Paint samples were analyzed using flame atomic absorption (EPA Method 7420) to determine the amount of lead in each sample.

Of the 18 samples that were collected, all were determined to contain detectable amounts of lead. See Table 1 on the following page for results.

Table 1: Lead-containing Paint Sampling Results

Sample Number	Sample Description	Location	Lead %	Lead-containing?
2001D001-01	Green paint	Sawmill/Top of tank hatch	0.020	Yes
2001D001-02	Green paint	Sawmill/Top of tank	0.11	Yes
2001D001-03	Green w/orange undercoating	Sawmill/Side of tank	14	Yes
2001D001-04	Green w/orange undercoating	Sawmill/Side of tank	17	Yes
2001D001-05	Green paint	Sawmill/Ladder	0.31	Yes
2001D001-06	Yellow paint	Sawmill/Water valve cover	0.53	Yes
2001D001-07	Green w/orange undercoating	Sawmill/Left vertical pipe on tank	31	Yes
2001D001-08	Green w/white undercoating	Sawmill/Pipes on concrete pad	0.38	Yes
2001D001-09	Green w/red undercoating	Costa/Top of tank hatch	0.076	Yes
2001D001-10	Green w/red and orange undercoating	Costa/ Top of tank	0.15	Yes
2001D001-11	Green w/orange undercoating	Costa/Side of tank	15	Yes
2001D001-12	Green w/orange undercoating	Costa/Side of tank	8.8	Yes
2001D001-13	Green w/orange undercoating	Costa/Ladder	9.0	Yes
2001D001-14	Green paint	Costa/Right vertical pipe	0.47	Yes
2001D001-15	Green w/orange undercoating	Costa/Left vertical pipe	27	Yes
2001D001-16	Yellow paint	Left water valve cover	0.45	Yes
2001D001-17	Green paint	Instrument box	0.49	Yes
2001D001-18	Yellow paint	Costa/Water valve cover	0.28	Yes

Table 2: Lead-containing Paint Summary

Lead-containing Paint	Location	Condition
Yellow paint	Costa and Sawmill: valve covers	Poor
Green paint	Costa and Sawmill: water tank, ladder, pipes, valves and wherever green paint is found.	Fair

It can, therefore, be assumed that all the green paint and yellow paint found on both the Sawmill and the Costa reservoirs contain lead.

When lead-containing paint is disturbed during demolition work, OSHA regulations must be complied with. For demolition purposes, all lead-containing paint must undergo testing to determine if it may be disposed of in a municipal landfill. Metal debris with lead paint on it may be sent to recyclers as scrap metal without removing the paint.

If you have any questions regarding this letter report, please call Diane Fujinaka at 836-8822.

Sincerely,



Mark T. Muranaka
President

APPENDIX 4

COMMENTS IN RESPONSE TO PRE-CONSULTATION

Harry Kim
Mayor



Dennis K. W. Lee
Director

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

July 13, 2001

Ron Terry, Ph.D.
HC 2 Box 9575
Keaau, Hawaii 96749

**SUBJECT : DRAFT ENVIRONMENTAL ASSESSMENT
REPLACEMENT OF COSTA AND SAWMILL WATER TANKS
TMK: 3 / 4-6-7: 81 and 4-6-8: por. 34**

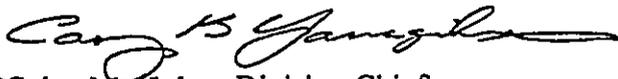
We acknowledge receipt of your letter concerning the subject matter, and provide you with our comments as follows:

1. Any building construction shall conform to all requirements of code and statutes of the County of Hawaii.
2. All development generated runoff shall be disposed on site and shall not be directed toward any adjacent properties.
3. All earthwork and grading shall be in conformance with Chapter 10, Erosion and Sediment Control, of the Hawaii County Code.
4. Any work within the County right-of-way shall be in conformance with Chapter 22, Streets and Sidewalks, of the Hawaii County Code. Kapuna Road and the Old Mamalahoa Highway, fronting the subject properties, are County roads.
5. The subject properties are found within Flood Zone "X", according to the Flood Insurance Rate Map dated September 16, 1988.
6. Improvements shall be located beyond the future road widening setback established by the Planning Department.

DRAFT EA
July 13, 2001
Page 2 of 2

7. We do not need to receive a copy of the environmental assessment when it is completed.

Should there be any questions concerning this matter, please feel free to contact Mr. Casey Yanagihara in our Engineering Division at (808)961-8327.


Galen M. Kuba, Division Chief
Engineering Division

CKY

BENJAMIN J. CAYETANO
GOVERNOR OF HAWAII



GILBERT COLOMA-AGARAN, CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES

DEPUTIES
ERIC T. HIRANO
LUNNEL NISHIOKA

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE HISTORIC PRESERVATION DIVISION
801 KAMOKILA BLVD., ROOM 666
KAPOLEI, HAWAII 96707

AQUACULTURE DEVELOPMENT
PROGRAM
AQUATIC RESOURCES
CONSERVATION AND
ENVIRONMENTAL AFFAIRS
CONSERVATION AND
RESOURCES ENFORCEMENT
CONVEYANCES
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
DIVISION
LAND MANAGEMENT
STATE PARKS
WATER AND LAND DEVELOPMENT

February 13, 2002

Dr. Bob Rechtman
Rechtman Consulting
HC1, Box 4149
Kea'au, Hawaii 96749

LOG NO: 29189 ✓
DOC NO: 0202PM18

Dear Dr. Rechtman:

SUBJECT: Letter Report on Archaeological Survey and Limited Cultural Assessment of Two Proposed Water Tank Locations, Ahualoa Homesteads (Rechtman, 2001), Ahualoa, Hamakua, Hawaii Island
TMK: (3) 4-6-07:81 and 4-6-08:48

Thank you for your letter of February 6, 2002, with a copy of a September 13, 2001 letter report (RC-0081) on an archaeological survey and limited cultural assessment study for two proposed County of Hawaii water tanks at the above referenced locations. We appreciate the opportunity to review and comment on your report, which will be summarized in an Environmental Assessment that is being prepared by Ron Terry.

Few or no historic sites were expected at the two water tank locations because of the history of past land use, which included sugar cane cultivation. Your report indicates that no historic sites were found in the archaeological survey. The probability of traditional cultural properties and practices seems remote for the same reasons. Based on the information provided in your report we believe that no historic properties will be affected by the proposed project.

The information presented in your report is adequate for an assessment study. However, these documents should be submitted to us in report format, not letter format. In the future, please do so. For this report, we do need a title page, however. Please prepare one and mail it to us. A copy of the report (with the title page) should also be sent to Marc Smith for our Hilo office library.

Aloha,


DON HIBBARD, Administrator
State Historic Preservation Division

PM:amk

APPENDIX 5

COMMENTS TO DRAFT EA AND RESPONSES

BENJAMIN J. CAYETANO
GOVERNOR OF HAWAII



GILBERT S. COLOMA-AGARAN, CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCES MANAGEMENT

DEPUTIES
ERIC T. HIRANO
LINNELL NISHIOKA

STATE OF HAWAII

DEPARTMENT OF LAND AND NATURAL RESOURCES

HISTORIC PRESERVATION DIVISION
KAKUHIHEWA BUILDING, ROOM 555
801 KAMOKILA BOULEVARD
KAPOLEI, HAWAII 96707

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
COMMISSION ON WATER RESOURCE
MANAGEMENT
CONSERVATION AND RESOURCES
ENFORCEMENT
CONVEYANCES
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
LAND
STATE PARKS

April 17, 2002

HAWAII HISTORIC PRESERVATION
DIVISION REVIEW

LOG NO.: 29661
DOC NO.: 0204PM08

Agency/Applicant: Mr. Ron Terry
GeoMetrician Associates
Address: HC 2 box 9575
Keaau, Hawaii 96749

Project: Draft Environmental Assessment—Replacement of Costa and Sawmill
Water Tanks at Ahualoa
Location: Ahualoa, Hamakua, Hawaii Island
TMK: (3) 4-6-07:81 and 4-6-08:48

1. We believe there are no historic properties present because:

- a. intensive cultivation has altered the land
- b. residential development/urbanization has altered the land
- c. previous grubbing/grading has altered the land
- d. an acceptable archaeological assessment or inventory survey found no historic properties
- e. other: no sites found in archaeological assessment study

2. This project has already gone through the historic preservation review process, and mitigation has been completed. X

Thus, we believe that "no historic properties will be affected" by this undertaking.

Signed Patrick C. McCoy Date 4/17/02
Patrick C. McCoy
Hawaii Island Archaeologist

PM:amk

geometrician
ASSOCIATES, LLC
integrating geographic science and planning

May 8, 2002

Patrick C. McCoy, Hawai'i Island Archaeologist
State Historic Preservation Division
601 Kamokila Blvd., Rm. 555
Kapolei, Hawaii 96707

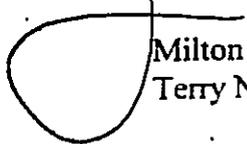
Dear Dr. McCoy:

**Subject: Comment Letter to Draft Environmental Assessment,
Replacement of Costa and Sawmill Water Tanks at
Ahualoa, TMK (3rd) 4-6-07:81 and 4-6-08:48**

This letter responds to your letter of April 17, 2002, concerning the Draft EA. Thank you for your determination that the project had already undergone the historic preservation review process (as discussed in the Draft EA), and that no historic properties will be affected by this undertaking.

Sincerely,


Ron Terry

cc:  Milton Pavao, Hawaii County DWS
Terry Nago, Okahara & Associates

Harry Kim
Mayor



Christopher J. Yuen
Director

Roy R. Takemoto
Deputy Director

County of Hawaii

PLANNING DEPARTMENT

25 Aupuni Street, Room 109 • Hilo, Hawaii 96720-4252
(808) 961-8288 • Fax (808) 961-8742

March 28, 2002

Mr. Ron Terry
GeoMetrician Associates
HC 2 Box 9575
Keaau, HI 96749

Dear Mr. Terry:

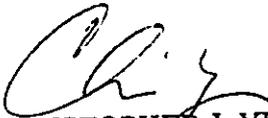
**Draft Environmental Assessment
Replacement of Costa and Sawmill Water Tanks at Ahualoa
TMK: 4-6-7: 81 and 4-6-8: 48**

This is to acknowledge receipt of your letter received on March 21, 2002 requesting comments on the draft environmental assessment for the replacement of the Costa and Sawmill Water Tanks at Ahualoa.

The properties are located within an area designated Agricultural by the State Land Use Commission and zoned Agricultural (A-5a) by the County. The properties are not situated within the County's Special Management Area (SMA). We agree with the information in the assessment that the properties are not recognized as either scenic sites or important viewplanes in the Hawaii County General Plan.

Thank you for the opportunity to provide comments. If you have any questions, please call our office at 961-8288.

Sincerely,


CHRISTOPHER J. YUEN
Planning Director

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cc: Long Range Planning

geometrician
ASSOCIATES, LLC
integrating geographic science and planning

May 8, 2002

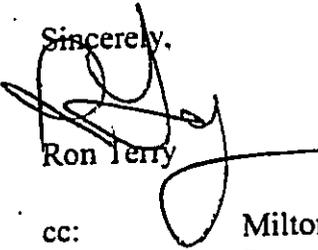
Christopher J. Yuen, Director
Hawaii County Planning Department
25 Aupuni Street
Hilo, HI 96720

Dear Mr. Yuen:

**Subject: Comment Letter to Draft Environmental Assessment,
Replacement of Costa and Sawmill Water Tanks at
Ahualoa, TMK (3rd) 4-6-07:81 and 4-6-08:48**

This letter responds to your letter of March 28, 2002, concerning the Draft EA.. Thank you for your confirmation that the properties are within the State Land Use Agricultural District and are zoned A-5a by the County. The Final EA includes the information that "the properties are not situated within the County's Special Management Area (SMA)." We appreciate your review of the document.

Sincerely,


Ron Terry

cc:

Milton Pavao, Hawaii County DWS
Terry Nago, Okahara & Associates