

Historic Resource Study  
of  
Kīpahulu Historic District  
Haleakala National Park

(Historical Data)

By

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Level of Investigation: Class B

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Memorandum

To: Regional Director, Western Region

From: State Director, Hawaii

Subject: Historic Resource Study, Kipahulu, Haleakala NP

Enclosed are three copies of subject study by Pacific Historian Apple. You may wish to forward copies to WASO and ARIZ.

Other copies are being distributed directly from here.

/SGD/ ROBERT L. BARREL

Robert L. Barrel

Enclosures

cc:

Denver Service Center

Attention: John Oschner

Hawaii State Office, Pacific Archeologist

Hawaii State Office, Pacific Historian

Superintendent, Haleakala

w/enc.

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Fig. 1 Kipahulu Sugar Mill Ruins; 1974 sketch plan . . . **27A**  
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### Introduction

In conformity with Presidential Executive Order 11593, the National Park Service nominated to the National Register of Historic Places the Kipahulu Historic District, along with several other nominations for areas and structures within the National Park System in the State of Hawaii. Because the scope and distribution of the cultural resources in Kipahulu were largely unknown but suspected to be plenteous, the Pacific Archeologist and the Pacific Historian recommended that the boundaries of the district coincide, at least temporarily, with the boundaries of the Kipahulu addition to Haleakala National Park. This was done to protect the known and unknown cultural resources, a policy laid down in Section 2(b) of the Executive Order.

With the recommendation of the State Historic Preservation Officer, the Regional Director, Western Region, nominated on November 20, 1973, the historical district to the National Register of Historic Places. The Kipahulu Historic District was declared eligible by the Secretary of the Interior for listing in the National Register on February 4, 1975 (Federal Register 1975:5342).

As noted by the keeper of the National Register when he discussed the Crater Historic District of Haleakala National Park, the entire park comes under the purview of Section 106 of the National Historic Preservation Act of 1966.

We note the intention stated on the [nomination] form to revise the district boundaries after surveys of the cultural resources have been completed. We would urge that those surveys be completed as

swift as possible so that revised boundaries can be established. That would ensure that the procedural restrictions of Section 106 would no longer be incumbent upon lands that do not contain cultural features.  
(Murtagh 1974)

This portion of the Historic Resource Study presents the known historical data of the seaward portion of the Kipahulu addition to Haleakala National Park. There is no evidence of significant human uses of the more inland portion above the 3,117 foot elevation -- the six-mile long Kipahulu canyon of almost pristine Hawaiian rain forest ecology, proposed for wilderness classification because of its lack of man-caused changes (Environmental Statement 1972:1,6). Historic uses were largely near the coast, at much lower elevations. The companion archeological portion is being prepared under the direction of the Pacific Archeologist. The immediate reason for both studies is the Kipahulu Development Concept Plan now under preparation by the Denver Service Center. Attention is paid primarily to the areas of potential environmental impact, and the purpose is to inventory, locate, evaluate and make recommendations concerning the cultural resources which must be considered in any development. Among other things, the companion studies may permit review of the historic district boundaries, will add certain items to the List of Classified Structures, and list and expound upon the individual features which comprise and justify the designation of a historic district in the National Register of Historic Places.

In beginning this twin inventory of cultural resources, the

National Park Service is (1) complying with Section 2(a) of Executive Order 11593; (2) complying with the Code of Federal Regulations, Title 36, Section 800.4(a); and (3) keeping the Congressional mandates in the 1916 Acts (as amended) which authorized the National Park on Maui and established the nationwide National Park Service.

In the historical section, placenames conform to the orthography of the 1974 Place Names of Hawaii, by Pukui, Elbert and Mookini. Modifications in traditional spelling are an apostrophe for the glottal stop and a macron over vowels that are long and stressed. These are used to approximate the pronunciation used by knowledgeable Hawaiians.

The National Register "eligibility" listing for Kīpahulu historic district includes only land within the existing boundaries of Haleakala National Park. This historical study goes beyond these boundaries to include resources on land likely to be added; i.e. the Kīpahulu sugar mill ruins. Any boundary revision for the historic district should await the fate of the proposed land acquisition.

### Kīpahulu's Historical Background

#### Placenames:

Kīpahulu is the ancient Hawaiian placename of a district on the east side of Maui island and on the slopes of Haleakalā volcano. To the north is the district named Hāna (a placename without known meaning). To the south is the district of Kaupō (literally meaning

the landing of canoes by night). In Hawaiian legend, Kīpahulu is the home of Laka, the god of canoe makers (See Kamakau 1961:41). (The god Laka is often confused with the goddess of the same name associated with the hula). The placename Kīpahulu literally means "fetch from exhausted gardens" (Pukui, Elbert, Mookini 1974:40, 96, 112). The original meaning and significance of most any Hawaiian placename lies buried with the chief who named it, or renamed it to memorialize an event, situation or person.

Within the Kīpahulu district are numerous narrow land subdivisions of various areas, widths and lengths which usually run from upland down the slope toward, reaching or including inshore waters. Each such subdivision also had a Hawaiian name. For instance, a gulch which contains a stream with numerous pools below a 200 foot waterfall a mile or so upstream is named 'Ohe'o. The falls themselves carry the name Waimoku (or Waimuku), and above the falls the stream and gulch carry the name Manawainui. Pipiwai is a tributary stream to Manawainui (Akana 1975), according to a man who was <sup>raised</sup> in the area. Recognized Hawaiian names for lands on either side of 'Ohe'o are Papaluana (on the Hāna side) and Ala'eiki (on the Kaupō side). Identifications, spellings today and over the years frequently vary from those shown on the Kīpahulu quadrangle topographic map (US Interior 1957). In addition,

Hawaiians named taro patches, rocks and trees that represented deities and ancestors, sites of houses and heiau (places of worship), canoe landings, fishing stations in the sea,

resting places in the forests, and the tiniest spots where miraculous or interesting events are believed to have taken place. And an important element -- one virtually unknown in Euro-American culture -- that added zest to the use of placenames and encouraged their proliferation is the pleasure they provided the poet and jokester, . . . (Pukui, Elbert, Mookini 1974: x).

Many of the Hawaiian placenames of Kīpahulu appear to have been lost, or misapplied recently. Probably certain of the pools of 'Ohe'o stream were named, but the generation of Hawaiians raised near 'Ohe'o around 1900 do not know the individual names of the pools and believed them to be nameless (Apple and Apple 1975:A-13).

As population shifted and decreased in Kīpahulu, as homesteads became deserted, and as a few new arrival took up residence, local usage over time in East Maui broadened the meaning of certain Hawaiian placenames so that they encompassed the lands of other placenames. (See Apple 1965:57). Kīpahulu and Kaupō districts are blanketed under the Hanā label in some current usages. The smaller sub-division names within Kīpahulu are found today on tax maps and old survey maps, are seldom used locally, and those who know them are becoming fewer. Yet the people of old who lived and worked on those lands knew their names intimately, applied them accurately, and had frequent daily uses for them. One placename that has been remembered and restored is Kapahu, the taro terraces of the 'Ohe'o "Living Farm" project.

Bernard Akana was born in Kīpahulu in 1908. He spent his

childhood at his grandfather's homestead just on the Kaupō side of 'Ohe'o gulch. The two-story frame house was below the present road and enclosed by a stonewall fence. His grandfather was Frank C. Po'onika, Mr. Po'onika was born at 'Ohe'o about 1843. Mr. Akana recalls the legend told him by his grandfather which explained the names of the three falls of Manawainui stream above Waimuku falls (below which the stream is named 'Ohe'o).

Two lovers, names not known, on an afternoon hike up Manawainui gulch became separated at a bend of the stream near the first waterfall above Waimuku. In his search for the girl, the boy called "u'a" (translation not known). This became the waterfall's name -- 'U'a. The youth searched upstream to the next waterfall, and near it his calls were echoed -- hence the Hawaiian name wawā (an echo of a particular nature). Still further upstream at the third waterfall he heard her laughing at him. Her teasing laugh can be heard there today. The Hawaiian name for this laugh, at least in the Kīpahulu area, is Alalā, and this is the name of the "laughing" waterfall. "'U'a, Wawā and Alalā are the names of the waterfalls" (Akana 1975).

#### Geographical Relationships:

In relationship to the available means of transportation to Hawaiians, East Maui was somewhat isolated from the rest of Maui island. Directly overland it could be reached through an arduous hike up to, through, and down from Haleakalā crater. Parallel to the coastline from either direction, hikers have many gulches to

cross. Through the crater or around the edges, the three districts of Hāna, Kīpahulu and Kaupō, were at great distances from other centers of population on Maui. The coastal travelling was eased some when the hilly trail was stabilized perhaps by East Maui's ruling chief Kiha-a-Pi'ilani (Kamakau 1961:429). As planned according to Wenkam in 1970,

the Kiha-a-Pi'ilani Highway was to connect these scattered pathways into a formal trail system that would provide communication between villages, a short route for runners carrying fresh fish to their chiefs, and a quick way for local armies to repel attack in isolated areas along the shore.

The smooth ocean stones that paved the trail were handed from man to man along a line of sweating workers that often stretched from the cool rocky shore upward to bare, sun-bleached ridges. The stones were carefully fitted in place without mortar, the flatest of them used in steeper places and the more rounded in gently sloping country. In steep wet areas, horizontal stones were placed parallel to each other down the slope to prevent flood waters from eroding the smooth walking surface. (Wenkam 1970:38)

Wenkam's description of method is probably correct. Wenkham describes the "Highway" as laid out for much of its length in long straight courses, "sometimes not curving around a hill but going straight up and over it" (1970:38-39). Modern Hawaiians call the trail Alanui (Warfield 1975), (which translates as "large path"). What Wenkham has described and what remnants of the trail

which have been inspected by Apple appear to have been a trail built sometime in the 1800's as a government project by the Kingdom of Hawaii. Taxpayers and prisoners probably put it into shape for travel by horses. Parts of the Alanui, certainly not those parts which follow contours inside gulches, may be improved portions of the ancient foot path built by Hawaiians in prehistoric times (See Apple 1965). Kiha-a-Pi'ilani, who lived in the 1300's may have been the ruling chief under whose sponsorship it was built to connect the various land units laterally. (Kamakau 1961:429) As noted previously (Apple 1965:65), Hawaiians needed and utilized most the trails which connected shore with the inland agricultural areas. Lateral trails were needed to support regional government. A regional government for Hāna, Kīpahulu and Kaupō would need an overland connection among and between the numerous valleys and gulches, whose seaward ends contained the dwellings. Part way up the slope was the agricultural area.

Kaupō appears to have been the most populous valley in ancient times, and was perhaps the most easiest reached part of East Maui by overland routes. This would have been through Haleakalā crater and down Kaupō gap, a route still in use. Kaupō had the reputation of being the place where the highest chiefs lived (Warfield 1968, 1975). By water, however, Hāna, with its protected bay would have been more accessible. Calmer waters at night may be behind the translation of Kaupō as "landing of canoes at night."

Hāna, Kīpahulu and Kaupō were also somewhat isolated over water from the rest of Maui island by paddled or sailed outrigger canoes, and later by sailing vessels of Western design.

To approach East Maui by water from the central Maui plateau, the two practical routes are either clockwise (from the northwest) from the northern side of the central Maui plateau or counter-clockwise (from the southwest) from the southern side. Either route was a relatively long and dangerous passage along seacliffs which bound the visible bulk of Haleakalā volcano. The northwest route, past Ke'anae peninsula, placed the trade winds off the port beam. Prevailing currents can drive drifting vessels into the rocks and cliffs. Offshore on this windward side of Haleakalā, winds often whip the waves into whitecaps. Canoes under paddle must fight waves as well as the strong sidewise drift.

On the southwest water route, after passing La Perouse bay, it was either an up-wind sail or an up-current paddle. Coming clockwise or counterwise to East Maui, small craft can find few landings (Armstrong 49, 51, 59, 172). Note that East Maui's commercial agricultural potential was successfully exploited only during the heights of Hawaii's steamer era, when sugar was king. By 1971, interisland barges had given up even infrequent runs to Hāna bay, citing among the reasons the navigational problems of the East Maui area. East Maui ranchers now ship cattle by truck or airlift.

While East Maui districts usually owed suzerainty to the Maui

chiefs who ruled the bulk of the island, Hāna, Kīpahulu and Kaupō as political districts enjoyed relative independence. Because of the geographical semi-isolation of Hāna, Kīpahulu and Kaupō from the rest of Maui, the East Maui area was hard to control, conquer or defend by Maui forces. But the districts were vulnerable to conquest by amphibious forces arriving from the Big Island of Hawai'i. The winds and seas which made East Maui hard to reach from the rest of Maui, placed it within practical trade wind sails of the Hāmākua and Kohala coasts of the island of Hawai'i (Armstrong 1973:59).

East Maui districts were politically annexed through conquest to the Big Island at least four times before 1800. The three districts were invaded and held by Umi, a Big Island chief and relative of Kiha-a-Pi'ilani, in the 1300's. Ruling Chief Kalaniopu'u, the Big Island chief who greeted Captain Cook in 1779, took Hāna again in the 1770's. A brother of Kamehameha the Great Kalanimakulohi-i-ka-pō'ōkalanani, occupied East Maui again in the 1780's. Unlike the previous invaders, the brother was kind to the planters and commoners of Hāna, Kīpahulu and Kaupō and earned the name of Ke'li'i-maika'i (the good and kindly chief), a name he kept and is best known by. He officiated for Kamehameha at the dedication of Pu'ukoholā temple in 1791, at Kawaihae, Kohala district, Hawai'i.

Ke'li'imaika'i did not keep Hāna long. The battles with Maui troops, who came overland, took place in Kīpahulu. The Big

Islanders were routed. Ke'li'imaika'i escaped only because the Kīpahulu people he had been king to sheltered him and finally smuggled him in a canoe to Hawai'i. (See Apple and Apple 1971: Jan. 9, A-11). Big Island forces permanently took control of East Maui when Kamehameha the Great reconquered the island of Maui in 1794. He had first conquered it in 1790, but lost it in a general revolt in late 1790 or early 1791 (Kamakau 1961: 25-32, 79, 111, 143-144, 188; Fornander 1969: II-93, 97-99, 205, 206).

In prehistoric and protohistoric times, before its sugar plantation days, Kīpahulu appears to have been a district sandwiched between two more important ones. To the south<sup>lay</sup> Kaupō, more populated, center for high chiefs, and with a relatively good land connection with the rest of Maui. In 1794, its Loaloa temple, one of several in the district, was rehabilitated by and services conducted on it by Liholiho, sacred son of Kamehameha who later ruled as Kamehameha II. Kamehameha the Great was passing through East Maui at the time with his fleet of peleleu war canoes (Kamakau 1961:188). Loaloa temple is believed to have been built by ruling chief Kiha Pi'ilani (Barrere 1961:87; Walker 1931). Note that Loaloa is a National Historic Landmark.

To the ~~south~~<sup>north</sup> was Hāna. Hāna had its bayside Ka'uiki, a hill which was occasionally defended or attacked by both Maui and Hawai'i forces. Hāna's bay was<sup>a</sup> relatively good canoe, and later ship, landing. Agriculture appears to have been the principal activity of Kīpahulu throughout its tenure as a Hawaiian district.

East Maui's geographical isolation also insulated it from historical events elsewhere in Hawai'i. The switch in the late 1800's in Hawaii's political status from kingdom to republic, then to incorporated territory of a world power had low traumatic impact on East Maui. But some of the worst excesses due to rivalry between converts to the invading Christian religions took place in Kaupō, Kīpahulu and Hāna. In the mid 1800's a Congregational mission was established in Hāna to challenge the Hawaiian native priests. Roman Catholicism came to Kīpahulu shortly thereafter, spread by Petero and Helio Koaelo, two converts who returned to Kīpahulu to preach as laymen. The Catholic religion took hold in Kīpahulu, while Hāna and later Kaupō, generally embraced Protestantism. (Conde 1887). The ordained Protestant ministers from New England stood aghast to see their prejudices translated into violence by their converts. One of the bigots who persecuted Kīpahulu Catholics was Samuel M. Kamakau, best known today for his writings on Hawaiian prehistoric and historic affairs. With his followers, Kamakau raided Catholic homes to destroy inside, backyard and trailside shrines. Police arrested those at a private Catholic prayer meeting in Hāna. Led tied together by ropes, the group added converts during the 90 mile march to court in central Maui. The slow procession grew daily. The judge dismissed the large assembly finally brought before him. These social scars took time to heal (Apple and Apple 1970: A-13).

Only sugar in the period 1850-1920; the resort hotel in Hāna

since 1946; visitors to the Kīpahulu addition to Haleakalā National Park since 1971; and rich resident retirees from the Mainland United States, have exposed East-Maui-born residents to the non-Hawaiian world.

Sugar first came to East Maui with a plantation operation in Hāna in 1849. When this proved to be economically feasible, and with sugar a fast growing industry in Hawai'i, three more plantations operated for various periods. They were Kaeleku (about where the present day Hāna airport lies); Hāna (mill site near the resort hotel); Reciprocity (near Mokae point/landing at Hāmoa) and Kīpahulu. Hāna shipped sugar and received supplies from nearby Kapueokahi harbor in Hāna bay, a distinct economic advantage over the other three plantations which had to use the rocky unprotected coast. When Hāna sugar finally phased out, pineapples were tried and a short-lived cannery stood by the harbor. Hāna plantation was the most extensive, longest lived, and best recorded. Hāna had a railroad to bring cane to the mill, but Kīpahulu floated cane to its mill in flumes. Imported laborers for the plantations included Portugese, Chinese, Japanese, Norwegians, Filipinos, Gilbertese and at least three Blacks. One was a single man, Bill John, who later was a sheriff at Pā'ia, Maui, and John Bill and May Bill, husband and wife. The Gilbertese wore rings in their noses. Each ethnic group had separate "camps," and responsibilities. At Kipahulu, in general, Japanese, Gilbertese, and Filipinos harvested ("cut cane"); the Chinese handled the irrigation; and

the Norwegians worked in the mill. The Portugese were foreman in the fields. One foreman was "Andreque," described as small and wiry, who oversaw the operation of the flume.

That portion of the flume which gave the most trouble crossed 'Ohe'o gulch. Cut stalks of sugar cane often piled up in it and required unjamming. Andreque could cross the dangerous flume without incident, but several Japanese and Filipino field hands fell to their deaths from it. The flume was not used for normal pedestrian crossing of 'Ohe'o gulch, being supported on concrete towers which required climbing, and the swinging flume was dangerous. Many of the camps were near the work areas. For instance, three or four Chinese had a small camp upland on Kaumakani, a broad land subdivision on the Hāna side and near 'Ohe'o gulch. Their job was the irrigation of the sugar cane which grew on Kaumakani (Akana 1975; Warfield 1975; Hedeman 1940; Howell 1975; Maui News 1915: Jan 23; Smith 1975; Wenkam 1970: 52-63). It should be noted that the Hawaiian residents of Kīpahulu were observers, not participants, in the sugar industry. They continued to be planters and fishermen, but made strong friends of certain of the plantation workers. Some of the workers stayed in East Maui and intermarried with the Hawaiians. Their descendents live there today.

Kīpahulu sugar plantation started ca. 1890, according to a Hawaii Visitors Bureau marker at the mill site, but more probably about 1881 (See Hedeman 1940; Maui News 1915). New mill machinery

ca. 1918 was landed with great difficulty. A winch broke when it tried to haul the heavy boilers up the seacliff. Four Germans, interred as enemy nationals from an American ship at Honolulu, were paroled to Kīpahulu plantation. They first worked as field hands, but this labor was arduous and their skills lay more with rigging and machinery. They built an adequate hoist and winched the machinery to the mill and helped install it. They also helped build the reinforced concrete mill stack which still stands. They probably also helped build the reinforced concrete flume towers which flanked 'Ohe'o gulch. Local Hawaiians remember the Germans as good cheese makers. Kīpahulu plantation folded ca. 1925, with mill machinery going to the Philippines, a usual final destination for Hawaiian mill machinery. Ownership and managers apparently changed frequently. Among the names of owners of Kīpahulu mill are H. Hackfield & Co., Jonathan Fassoth (one of his sons may have operated the reassembled mill in the Phillipines), William Williamson, Haiku Fruit Co., and Renton Hind (Akana 1975; Warfield 1975; Smith 1975; Howell 1975; Friz 1969; Wright 1974). The Hāna plantation and mill operation lasted into the mid- 1940's (Wenkam 1970: 69).

When sugar phased out in East Maui, some of the fields turned to rice production. So did some of the taro patches. The former Chinese plantation workers raised rice commercially until the cheaper product from California flooded the market. Kīpahulu experienced the transition in the mid- 1920's, but apparently

the acreage in rice was small compared to what had been in sugar. Sometime in the 1920's, a Japanese known as Ambo raised vegetables at Kapahu, the taro terraces used in 1975 for a "Living Farm" on the Hāna side of 'Ohe'o gulch. His house site was in the lower-Hāna corner of the terraces (Smith 1975). The former Kīpahulu cane lands generally turned to cattle range after 1926.

The road to Hāna from central Maui, long abuilding, coming clockwise from the northwest, was completed in 1926. It was mud and gravel, subject to frequent washouts (See Wenkam 1970: 65-67). The road on to Kīpahulu from Hāna was even more narrow, less maintained and less reliable, and from Kīpahulu to Kaupō even worse. Bridges were frequently washed out and had to be rebuilt. When such happened, cut-off residents either used the old trails or relied on self-sufficiency. The first bridge over 'Ohe'o gulch was narrow; built in the early 1900's, and probably one-horse wide. It was widened for horse-drawn rigs. Possibly in 1910, "big timbers" were hauled in for a new bridge. This "big bridge" may be represented in the two existing but abandoned concrete pilars, one on each side of the gulch. The bridge was too low for major floods and was washed away, (Akana 1975). The existing reinforced concrete bridge, at a higher level than the "big timber" one, has the date 1916 in the concrete.

The Valley of the Seven Pools Project Committee bought part of the district of Kīpahulu to add by donation to Haleakala National Park. Major participating organizations and individuals include

The Nature Conservancy, Laurance Rockefeller, Milton Howell, Charles E. Lindberg, Agnes K. (Annie) Smith, Jean and Hamilton McCaughy (Kipahulu Cattle Co.), Sam Pryor and Walter Collins.

#### Historical Themes

From the foregoing historical background, five themes are selected. These are Hawaiian Land Use; Hawaiian Placenames; Religious Persecution; Sugar; and Trails and Roads. The sugar and religious themes are part of two of the nationally significant themes identified in Dr. John A. Hussey's 1962 study of Hawaiian history, part of the National Survey of Historic Sites and Buildings (Hussey 1962). Of these two, only sugar is represented by surviving structures. These two themes in Kīpahulu are only of Statewide significance, however. Events and structures connected with the two themes are better represented elsewhere in the State. Since the shrines destroyed in Kīpahulu, and undoubtedly setup again, have disappeared along with the households to which they were attached, the Religious Persecution theme is not explored here further. Catholics were jailed and even tortured in the Honolulu Fort (Kuykendall 1968: 141, 164-165; Yzendoorn 1927: 46-47; See Hussey 1962:28).

The four remaining themes of land use, placenames, sugar and overland transport have sites or structural remains in Kīpahulu that may be used to interpret the themes and enrich visitor understanding of the district. The themes are further discussed below, and the sites and structural remnants identified.

Hawaiian Landuse ca. 1900

Ownership and use of the Kīpahulu land ca. 1900 by its Hawaiian occupants is a direct result of (1) the Great Mahele (the division of his lands by the King ca. 1850); and (2) land acquisition for a sugar plantation ca. 1890.

In a series of land transactions starting in 1848, Kamehameha III retained some lands for the crown, granted some to the government (the Kingdom of Hawaii), and granted the rest to 280 of the highest chiefs, himself included. On all lands -- retained or granted -- commoners in residence could claim ownership of their small inholdings and be awarded deeds. Kingdomwide, few commoners followed the complicated and costly legal procedures to take title. Some remained living on their traditional family land, but more eventually abandoned it for Hawaii's port towns. Many families died out in the general population decline. Commoners' lands, either with title or without, often consisted of a residential plot near the shore and one or more detached plots inland for the growing of taro and other cultigens. Commoners' "kuleana" lands can best be thought of as small inholdings, surrounded by land owned by the crown, government or a chief. Those whose families did not take title to the lands on which they lived and worked were "squatters" in the Western legal sense. When a kuleana owner died without issue, the land reverted back to the owner of the surrounding area.

By 1950, title to the Kīpahulu lands acquired for Haleakala National Park, from crater rim to the coast, was apparently held

by the State of Hawaii (political descendent of the Kingdom); by Ulupalakua Ranch (Kīpahulu was only a small part of its vast land holdings) and by several Hawaiians. That held by the State was either or both former crown or government land; that held by Ulupalakua Ranch were lands consolidated for sugar cane cultivation; and that by Hawaiians were probably remnants of lands granted to the chiefs. Perhaps there was a kuleana or two held by the family of the original grantee. The above is a generalization -- the land history details are unknown and await research into this technical phase. It is suspected, however, that usual land-grabbing techniques aided the owners of Ulupalakua Ranch to consolidate lands in Kīpahulu in the 1890's for the Kīpahulu sugar plantation. In establishing the plantation, the marginal and steeper lands, such as 'Ohe'o gulch, were not necessarily acquired and some still contained by 1900 Hawaiians in residence. Some of the marginal or gulch lands were owned by the Hawaiian families who used them, and some occupants may have <sup>been</sup> squatters by Western legal standards. Squatters were not evicted. As noted before, Hawaiians were observers and not participants in Kīpahulu's sugar industry. They continued to utilize their traditional lands in marginal and gulch areas in traditional ways. The reduced Hawaiian population did not need the lands utilized for sugar. Among those named as receiving Great Mahele land grants in Kīpahulu were Isaac Harbottle (Land Court Award No. 1528), known to the Hawaiians as Hakuole; Samuel M. Kamakau (1654),

the native historian; Kapule (2087), who may have owned the taro terraces of Kapahu; Haipu (1685), a hairlipped man, whose grass house in the early 1900's was "in the flat grassy area mauka and just Kaupō of where Akana's grandfather, Po'onika, lived;" Kaiwiaka (3065), whose vault grave may be seaward of the Park 1975 tool shed; and José Keko (3350); a grand-uncle of informant Bernard Akana (Vaughan 1972). The records and testimony pertaining to these and other land awards in Kīpahulu for the period 1850-1890 form a rich source of untouched historical data. Based on present knowledge, to represent Hawaiian Land Use ca.1900, the following three structures are identified:

KAPAHU: The combined "wet" and "dry" horticultural terraces now being reused for native cultigens by the Hana Cultural Center and the National Park Service (Joseph Kahaleuahi, planter) on the Hāna side of 'Ohe'o gulch, and representing the several horticultural plots which lined both sides of the gulch ca. 1900, and which supplied vegetable food for the Kīpahulu Hawaiian families. (Akana 1975; Smith 1975; Warfield 1975; Yen 1972:18).

KANALULU TOMBS: Ca. 1900 burials in concrete tombs and within a concrete slab; slab enlarged for more recent use; belongs to the

Kanalulu family, probably the most economically favored of the several Hawaiian families living in Kīpahulu. The principal feature is a long concrete platform on which are built four rounded tombs. There is a platform extension containing at least three more graves. On the west side and nearby is an older type grave outlined with stones and covered with pebbles. The concrete burial graves are enclosed by a barbed wire fence. The graves are of members of her father's family, according to Mrs. "Annie" K. Smith (1975), whose family owned the land before it was acquired for the Park, and consists at least of her paternal great-grandfather, paternal grandfather, father, brother plus wives and children -- names and number not remembered. In 1971, the National Park Service repaired holes and otherwise patched the tombs. The Kanalulu family Western style tombs represent the close association Hawaiian families had to their land and the ancient practice of keeping remains of departed relatives close to their family. Use of Western-type tombs on family land near the houses permitted the

family to combine Western and Hawaiian traditions.

PO'ONIKA HOMESTEAD: The two-story frame house, with outbuildings, enclosed by a stonewall fence on the Kaupō side of 'Ohe'o gulch and on the seaward side of the road. Only the stonewall fence is standing in 1975. The enclosed area is heavily overgrown. Frank C. Po'onika was born there about 1843 and raised his grandson, Bernard Akana, there in the early 1900's. (Akana 1975). The stonewall fence would represent an enclosure for cattle, and thus would date from whatever time free-roaming cattle became prevalent in Kīpahulu. The Po'onika homestead ruins marks one of the permanent homes of the Hawaiian families who lived in Kīpahulu ca. 1900. Whole families or parts of them would spend various periods of each year living inland near their agricultural plots, but considered their homestead near the sea their permanent home. (Warfield 1975; Akana 1975).

#### Hawaiian Placenames

'Ohe'o is the Hawaiian placename for a gulch and stream in Kīpahulu. Hawaiian homesteads were near its mouth on the coast.

More inland along the sides were agricultural plots. 'Ohe'o stream and gulch were the center of local activity ca. 1900.

"We took our baths in them and washed the clothes and dishes in them," said Mrs. Meleana Warfield, who was born at Kīpahulu in the Kalalau family and raised in a Hawaiian household which had its home adjacent to the pool in 'Ohe'o stream favored by Hawaiians for swimming.

Another who swam, took baths and washed household items in one of 'Ohe'o's pools was Mrs. Louis Smith. "Annie" (Agnes K.) Smith was born and raised at 'Ohe'o as a member of the Kanalulu family. By the 1940's those who had been children at 'Ohe'o in the early 1900's had grown up and moved, some as far as Kaupō, some to Honolulu. They were the last generation raised at 'Ohe'o. The old folks were gone as well. Grandparents, or others of that generation, had done the raising at 'Ohe'o -- the middle generation was absent. (Akana 1975; Warfield 1968, 1975; Smith 1975; Mrs. Kahaleuahi 1975; DeCoite 1975; J. Kahaleuahi 1975)

In 1946, what was then called the Kawiki Inn, and now known as the Hana Ranch Hotel, was opened as a deluxe hide-away resort. 'Ohe'o was "designated 'the Seven Sacred Pools' by a hotel social director to make Kīpahulu a more exciting destination" (Wenkam 1970:83). (Medeiros 1960, 1968; See Apple 1968, Apple and Apple 1975: A-13). The 'Seven Sacred Pools' label was well publicized by the hotel, used in its literature, reused by others and became popular among those who did not know of or care about its real name.

There was no one living at 'Ohe'o to protest. In the spirit of true aloha, one Hawaiian born at Kīpahulu said, "Let them (the caucasians and non-East Maui Hawaiians) call it what they want -- we (the East Maui Hawaiians who know) will call it what we want: 'Ohe'o. They have their name, we have ours" (name withheld by request). But the aloha was not directed toward outsiders, but toward the protection of one of their own, the social director who had applied the label. East Maui people are protective of each other from outside pressures which might cause embarrassment.

The same social director was the source of a "hint" of sacredness to the 'Ohe'o pools which appeared in Pukui, Elbert and Mookini's Place Names of Hawaii (1974:168). Mrs. Pukui stayed at the hotel. The social director guided Mrs. Pukui through Kīpahulu during the research phase, and Mrs. Pukui had no contact with natives of the Kīpahulu area (Pukui 1975; See Schmitt 1974).

To get seven pools, the largest seven of many pools in 'Ohe'o stream must be counted below Waimuku falls a mile or so upstream. The National Park Service may be stuck with the "Seven Pools" (without the sacred) label. A compromise in view of the situation might be "Seven Pools at 'Ohe'o," which would at least recognize both the modern and ancient names. (Howell 1975; See Paki 1970).

SEVEN POOLS AT 'OHE'O: 'Ohe'o stream between  
Waimuku falls and the coast, to illustrate  
the importance of placenames to Hawaiians;

and show how a Hawaiian placename for a major feature can be replaced by an invented foreign name.

### Sugar

Land in use in the Kingdom of Hawaii for the growing of sugar cane increased from 12,225 acres in 1873 to 125,000 acres in 1898. In this span of 25 years, the Kingdomwide area devoted to cane was multiplied by ten. This expansion of acreage is part of the explanation of the increase in the same period of the crop from 25 million pounds to 500 million pounds. By 1898 an acre of sugar cane produced twice as much sugar as an acre had produced 25 years before. Among the other causes for the increase in productivity were development of reliable water sources, the use of fertilizers, the Hawaii developed strain of "Lahaina" cane, efficiency gained in milling, and an organized industry. (Kuykendall 1967: 62-78).

Kīpahulu sugar plantation appears to be among the marginal plantations of Hawaii. It had a relatively short span of operations (1881? - 1925) and frequent changes of ownership. Certainly one of its problems was transportation: to and from its landing at Ka'upīpa by ship, and overland within the plantation itself. Ships stood offshore to land and receive cargo, which was lightered between ship and rocky seacliff. Numerous gulches divided the land into a series of steep flats where cane could be grown. Cane delivery was handled by a flume to the mill. In addition, each major growing area is believed to have had an individual irrigation

system. Thus, field and mill operations were dependent on rain. The rain directly through surface runoff or indirectly through springs and streams had to be channeled into man-made ditches and troughs. There were no known reservoirs or big tanks. July-August and January-February are traditionally dry periods in Kīpahulu (Yen 1971:17). If it didn't rain, cane went unwatered and the mill remained closed. In 1975, cattle now graze on most of the former cane fields; some portions have become overgrown. Plantation operations made major changes in the lower elevations of Kīpahulu.

'OHE'O FLUME: This major gulch was crossed by a flume at a narrow point and at an elevation lower than the water source on Ka'umakani on the Hāna side, and high enough to have proper loss of elevation between the gulch and the mill. The flume floated cane stalks to the mill. The reinforced concrete towers, which supported the cables from which the flume hung like a suspension bridge, are believed to have been built during World War I by the four German internees. The towers still stand. Two 16 inch diameter wheels are embedded on the top of each tower to support the cables which crossed the gulch. The tower on the Hāna side is about 25 feet high; on the Kaupō side

just under seven feet. Bases of each are about 45 inches wide on each side, but the front and back of the Kaupō tower taper in to make the top 20 inches wide on each side. The flume represents how the Kīpahulu plantation solved its problem of getting cane stalks over the deep 'Ohe'o gulch to the mill for processing. The flume also provided water and transport for cut-cane of the fields between 'Ohe'o and the mill. It may have supplied water to the mill.

KĪPAHULU SUGAR MILL: The existing ruins are believed to represent the mill as it was modified by new machinery during World War I. See Fig. 1 for plan of ruins. The stack, about 100 feet high, was built at this time.

MANAGER'S HOUSE: The house is believed to date from about World War I and built by Jonathan Fassoth, mill owner and manager at the time. It was once surrounded by other houses, as evidenced by the concrete steps in the vicinity. These other houses would have been for the sugar boiler, company clerk and other key employees.

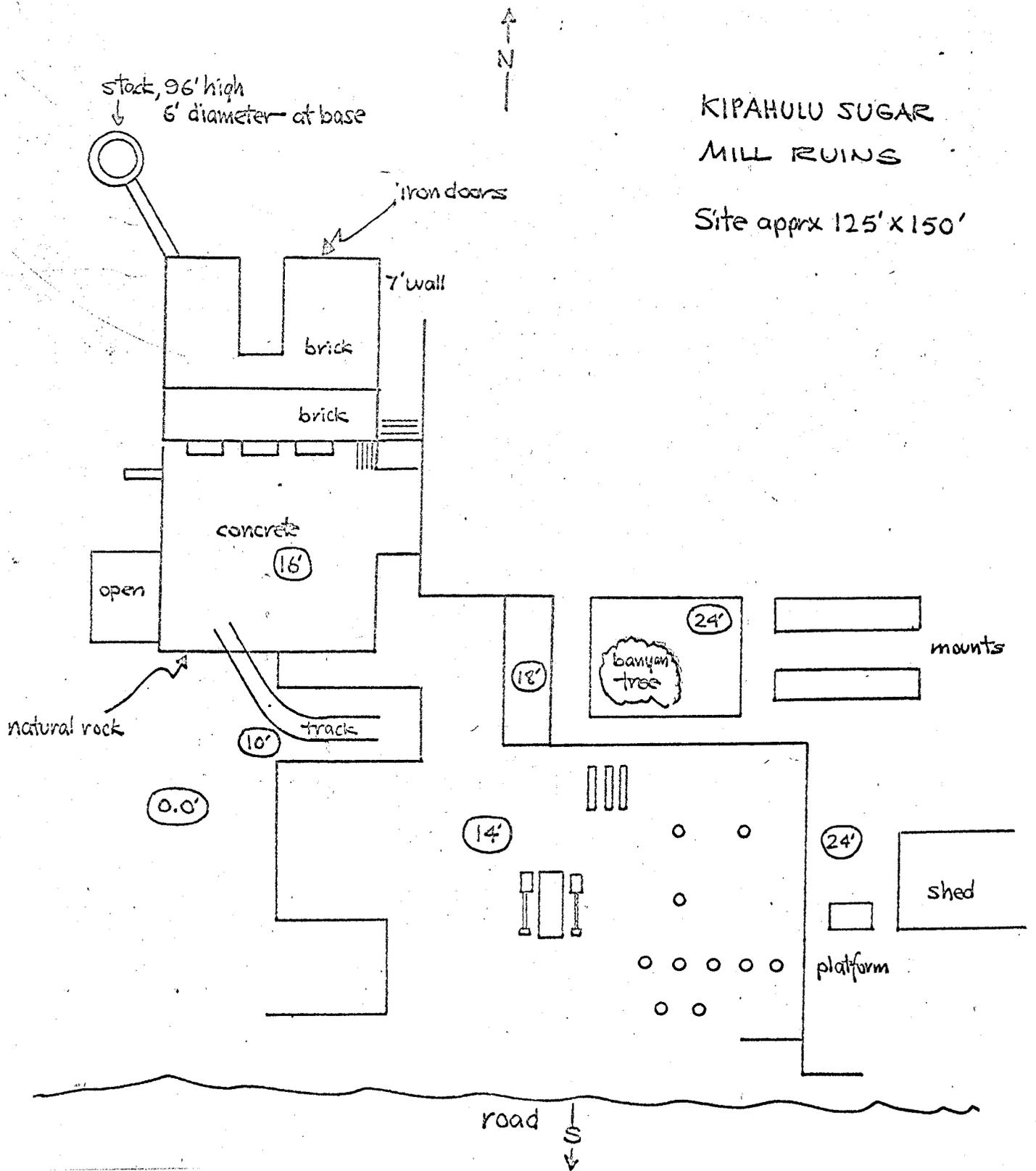


Fig. 1 Kipahulu Sugar Mill Ruins; . 1974 sketch by Wright (1974)

## Trails and Roads

Hawaiians solved their overland transport needs in accordance with their technology and available means of transport -- feet. It is not known if any portions of the Kiha-a-Pi'ilani trail exist with<sup>in</sup> the Kīpahulu district which is a part of Haleakala National Park, or not. If any are found, even a section modified in historic times for use by horses, they should be preserved. Across 'Ohe'o gulch, any trail was probably not formalized with paving. The trail which connected Kaupō with Hāna through 'Ohe'o is believed to be the one that drops down to the so-called "fourth" pool, the favored swimming place of Hawaiians, from the parking area on the Kaupō side, and ascends again on the Hanā side toward the Annie Smith cabin. This is the trail described as used in her childhood by Meleana Warfield (1975). Because of the flooding which made use of the crossing of the "fourth" pool dangerous or impractical by foot or horse, 'Ohe'o gulch was spanned in the early 1900's by a series of bridges, each getting wider, longer and higher. The next to the last bridge is represented by the two concrete supports immediately seaward of the 1916 bridge. This was probably the "big timber" bridge remembered by Akana (1975), and he dates it at about 1910. The present bridge was apparently constructed in 1916. To represent the evolving technological answers to the changing transportation needs of Kīpahulu across the major physical barrier of 'Ohe'o, the following two features are selected.

'OHE'O GULCH BRIDGE  
EARLIER BRIDGE SUPPORTS

Classified Structure Recommendations

KAPAHU

Order of Significance: Second  
Level of Treatment: Restoration

Restore water source from upland springs;  
clear exotic vegetation from additional  
agricultural area; build stonewall fence  
to exclude cattle.

Preliminary estimate of cost: \$11,200

KANALULU TOMES

Order of Significance: Third  
Level of Treatment: Preservation

Clear vegetation from and enclose with  
barbed wire fence the grave now outside  
enclosure.

Preliminary estimate of cost: \$400

PO 'ONIKA HOMESTEAD

Order of Significance: Third  
Level of Treatment: Preservation

Clear area within stonewall fence of exotic  
vegetation; repair stonewall fence.

Preliminary estimate of cost: \$2,000

SEVEN POOLS AT 'OHE'O

Order of Significance: Second  
Level of Treatment: Preservation

'OHE'O FLUME

Order of Significance: Third  
Level of Treatment: Preservation

KĪPAHULU SUGAR MILL

Order of Significance: Third  
Level of Treatment: Preservation

Remove banyon tree whose roots are wedging  
apart components of sugar mill ruins; clear  
away other vegetation.

Preliminary estimate of cost: \$900  
(Note: in 1975 -- not in U. S. Ownership)

MANAGER'S HOUSE

Order of Significance: Third  
Level of Treatment: Adaptive Restoration

Exterior to remain; interior for quarters

Preliminary estimate of cost: \$6,000  
(Note: in 1975 -- not U. S. Ownership)

'OHE'O GULCH BRIDGE

Order of Significance: Third  
Level of Treatment: Preservation

EARLIER BRIDGE SUPPORTS

Order of Significance: Third  
Level of Treatment: Preservation

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APPENDIX



Fig. 2 'Ohe'o gulch, from site of flume



Fig. 3 Taro terraces at Kapahu, Hana side of 'Ohe'o



Fig. 6 Flume tower, Hana side of 'Ohe'o, looking to Hana



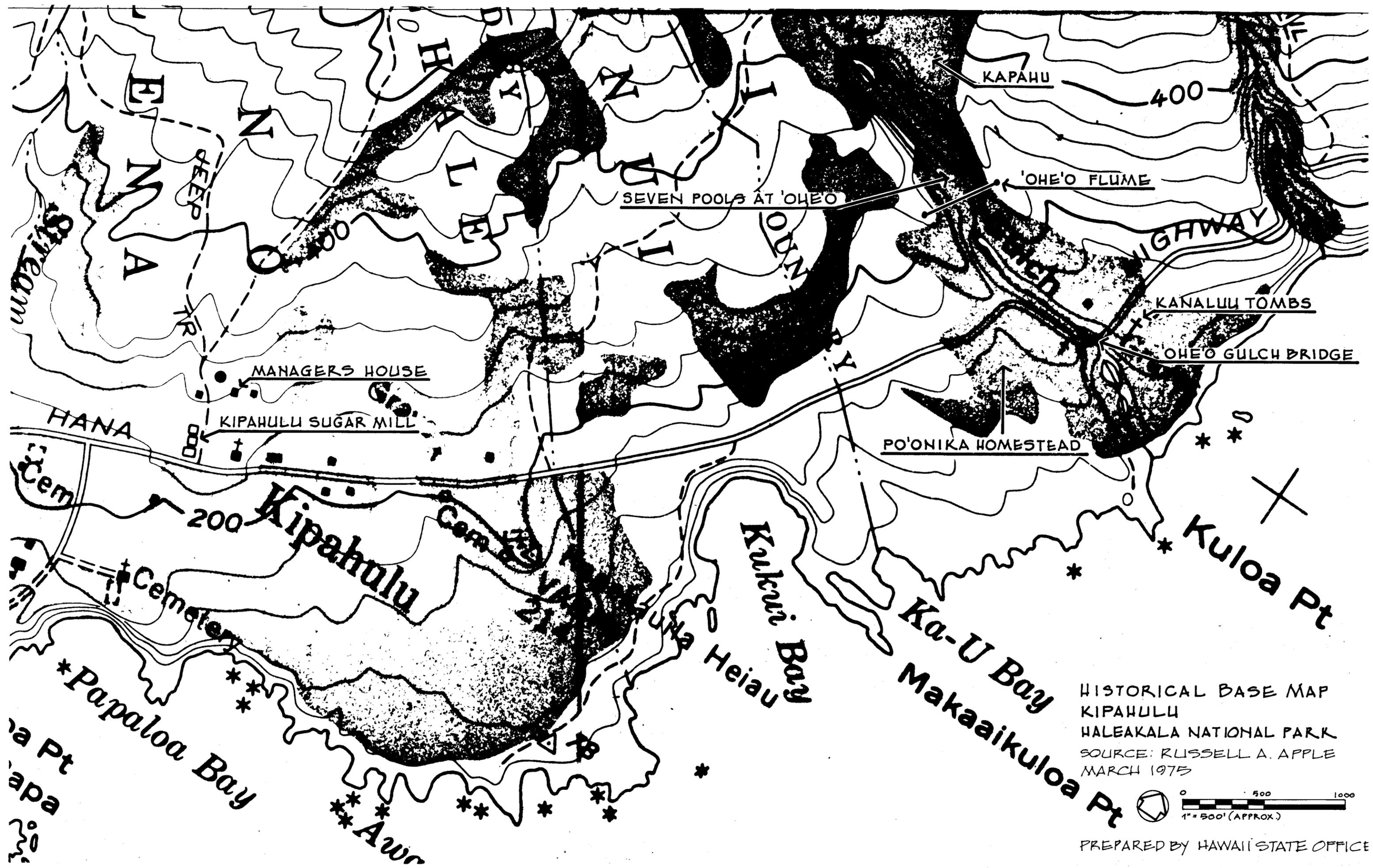
Fig. 7 Flume tower, Kaupo side of 'Ohe'o



Fig. 10 'Ohe'o gulch bridge, view from Kaupo side



Fig. 11 Kipahulu sugar mill ruins, from road, Kaupo side



HISTORICAL BASE MAP  
 KIPAHULU  
 HALEAKALA NATIONAL PARK  
 SOURCE: RUSSELL A. APPLE  
 MARCH 1975



PREPARED BY HAWAII STATE OFFICE