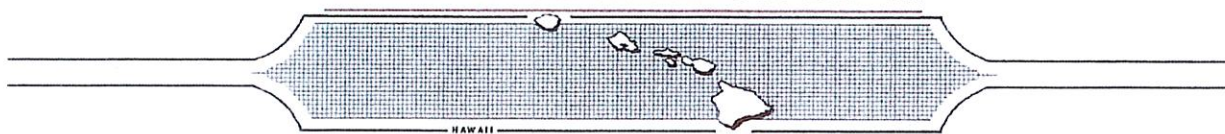


SCIENTIFIC CONSULTANT SERVICES Inc.



Hawai'i Island Office: PO Box 155 Kea'au, HI 96749

September 24, 2020

Don Morris
General Manager
HPPOA
HC 3 Box 11000
Kea'au, HI 96749
808-966-4500
gm@hppo.net

Re: Archaeological Field Inspection Letter Report for a 22,445 Square Foot (0.515-acre) Portion of 17th Avenue [TMK: (3) 1-5-023:253(por.)] in Hawaiian Paradise Park, Waikahekahe Nui Ahupua'a, Puna District, Hawai'i Island.

Aloha e Don:

At your request, Scientific Consultant Services, Inc. (SCS) conducted an archaeological field inspection (AFI) to determine the presence or absence of historic properties on a 22,445 square foot (0.515-acre) portion of 17th Avenue referenced in the subject heading above (Enclosures 1 and 2). The surveyed portion of 17th Avenue is bounded to the northeast by residential Parcel 070 and residential Parcel 071, and is bounded to the southeast by Parcel 126 (Enclosure 3). Parcel 070 has been bulldozed and there is a house constructed on it. Parcel 071 and Parcel 126 are undeveloped land. The property is owned by Paradise Hui Hanalike. The point of contact is Mr. Don Morris. Mr. Morris can be contacted by mail at HC 3 Box 11000, by telephone at 808-966-4500, and by email at gm@hppo.net.

The AFI was conducted in anticipation of improving the roughly 80.0 meter long section of 17th Avenue that was surveyed. This section of roadway within the project area was not built when 17th Avenue was constructed as there were concerns that archaeological features might be present nearby. The concerns were based on an archaeological field inspection conducted by PHRI, Inc. (1985) stating there were dry-land agricultural features identified within several parcels along this section of 17th Avenue. There were no maps showing locations of features and no detailed descriptions of the archaeological features. At some time in 2014, SHPD Archaeology Branch Chief, Theresa Donham and SHPD Hawai'i Island Archaeologist, Sean Naleimaile conducted a site visit of several parcels along this section of 17th Avenue for a proposed walking path (Sean Naleimaile email 1/1/2020). There were no archaeological features identified during the site visit.

Project Area

The surveyed portion of unimproved 17th Avenue is a roughly 80.0 m long (nw/se) by 12.5 m wide. The AFI pedestrian survey was conducted in an area that was 5.0 m wider than the road corridor and included 5.0 meters of road frontage in Parcel 070, 071 and 126. The overall AFI pedestrian survey covered an area that was 80.0 m long (nw/se) by 22.5 m wide and included a total of 22,445 square feet (0.515-acre).

Environmental Background

The property is located at 155 feet (47 meters) above mean sea level on a single Kīlauea lava flow dated between 200 and 750 years before present (Wolfe and Morris 1996). The geological substrate is bare pāhoehoe lava (rLW) with very shallow soil deposits (Sato 1973:34). The property ground surface is undulating with a slight easterly slope. Annual rainfall at the property ranges from 120 to 160 inches. There are no major gulches or natural drainages located near the project area.

Plants in the project are dominated by false staghorn fern (*Dicranopteris linearis*), 'ōhia (*Metrosideros* sp.) and introduced species such as waivi (*Psidium cattleianum*), common guava (*Psidium guajava*), octopus tree (*Schefflera actinophylla*), Moluccan albizia tree (*Falcataria moluccan*), Asian melastoma (*Melastoma septemnerium*), and Koster's curse (*Clidemia hirta*).

Cultural and Historical Background

Historical accounts pertaining to lands of the project area region are scarce but provide some information on traditional residence patterns, land-use, and subsistence. William Ellis passed through Waikahekahe Nui Ahupua'a in 1823 while travelling along the coastal trail from Kīlauea to Waiākea Ahupua'a, Hilo [Enclosure 5]. Ellis' journey took him along the coast east of the project area lands. Ellis did not describe the region of Waikahekahe Ahupua'a, but stopped in a small inland village in Honolulu Ahupua'a, and rested in the shade of a canoe house along the coast of Waiakahiula Ahupua'a (Ellis 1963:294-295), both south of Waikahekahe Nui [Enclosure 6]. Honolulu Village and a nearby village were inland and small, and the population was dispersed.

Ellis also described a village, likely Hā'ena, in Kea'au Ahupua'a, north of Waikahekahe [see Enclosure 5]. The village was large and populous with an abundance of taro, sweet potato and sugarcane gardens (Ellis 1963:296). He suggested the area was made more fertile by a flowing stream where he quenched his thirst.

Waikahekahe Nui Ahupua'a is a thin traditional Hawaiian land division that only extends to 1,130 ft (344 m) amsl. It is bounded to the north and west by Kea'au Ahupua'a, and to the south and west by Waikahekahe Iki Ahupua'a.

During the Māhele of 1847-48 and the Kuleana Act of 1850, Waikahekahe Ahupua‘a was awarded to Sarah (Sally aka Kale) Kani‘aulono Davis as Land Commission award (LCA) 8522 B:3. Sarah Davis (1797-1867) was the first born child of Isaac Davis and chiefess Nakai Nalima‘au‘alu. Sarah Davis was also awarded land in Honokaula, Maui where she lived, married, raised children, and is buried. Three small Land Grants (LG) were made along the coast south of the project area in Maku‘u and Halona Ahupua‘a [see Enclosure 6]. LG 1013 was purchased by D.W. Maiau, LG 1014 was purchased by Kea, and LG 1537 was purchased by Kapohana.

W.H. Shipman leased and later purchased large tracts of land in Kea‘au from the estate of Prince Lunalilo as part of the Shipman cattle and sugarcane enterprises in the late 1800s. He added to his property with the purchase of Waikahekahe Nui and others further south. The project area and surrounding lands were not used for growing sugarcane as the soil is too shallow. The area remained unaltered and undeveloped forest with a large variety of introduced and invasive species growing until it was purchased by David Watumull from W.H. Shipman, Ltd in 1959. The land was subdivided and sold as lots in the Hawaiian Paradise Park (HPP) subdivision. HPP is 15.6 square miles divided into approximately 8,800 lots.

Previous Archaeological Studies

Both pre-Contact era and post-Contact era habitation and land-use are known to have occurred along the coast. The project area parcel is 3.55 km (2.2 miles) southwest of the coast. The majority of studies conducted in Waikahekahe Nui and surrounding ahupua‘a were conducted along the coast [Enclosure 7]. Coastal archaeological sites consist primarily of habitation features, agricultural features and trails. Habitation features are primarily enclosures, platforms, rock paved area, and terraces. Agricultural features include rock clearing mounds and small garden enclosures.

A pedestrian survey (Komori and Peterson 1987) conducted within the near coastal flats of Maku‘u Ahupua‘a identified five agricultural complexes, a habitation platform, several burials, petroglyphs, and a refuge cave. Archaeological features included rock walls, lava tubes, terraces, platforms, ditches, and cleared garden areas.

There were only three archaeological sites documented within more than 2,000 acres in the inland portions of Maku‘u Ahupua‘a [see Enclosure 7]. Sites included a rock mound marker, an agricultural terrace and a complex consisting of a large enclosure, a rock mound, a rock wall, and a platform.

Project Area Expected Survey Results

Based on previous archaeological studies, historical and ethnographic studies, and land-use research in the area of the property, it was expected that if historic properties were located on the property, they would be related to pre-Contact era inland agriculture and temporary habitation. Archaeological features that might be encountered include rock clearing mounds, rock walls, rock alignments, enclosures and terraces.

AFI Pedestrian Survey

A pedestrian survey of the entire parcel was conducted on September 10, 2020 by SCS Senior Archaeologist Glenn Escott, M.A. and Suzan Escott, B.A. A series of northwest-southeast transects, spaced 1.0 to 2.0 meters apart was walked across the entire property. Vegetation was thick and ground visibility was fair to poor. The pedestrian survey totaled eight person-hours.

No features, feature remains, or artifacts were located within the project area. The field inspection pedestrian survey concluded that there are no historic properties within the project area and that there will be no effect to historic properties posed by the completion of 17th Avenue road building.

Sincerely,



Glenn G. Escott, MA
Senior Archaeologist
Scientific Consultant Services, Inc.
PO Box 155 Kea'au, HI 96749
808-938-0968 (cell)

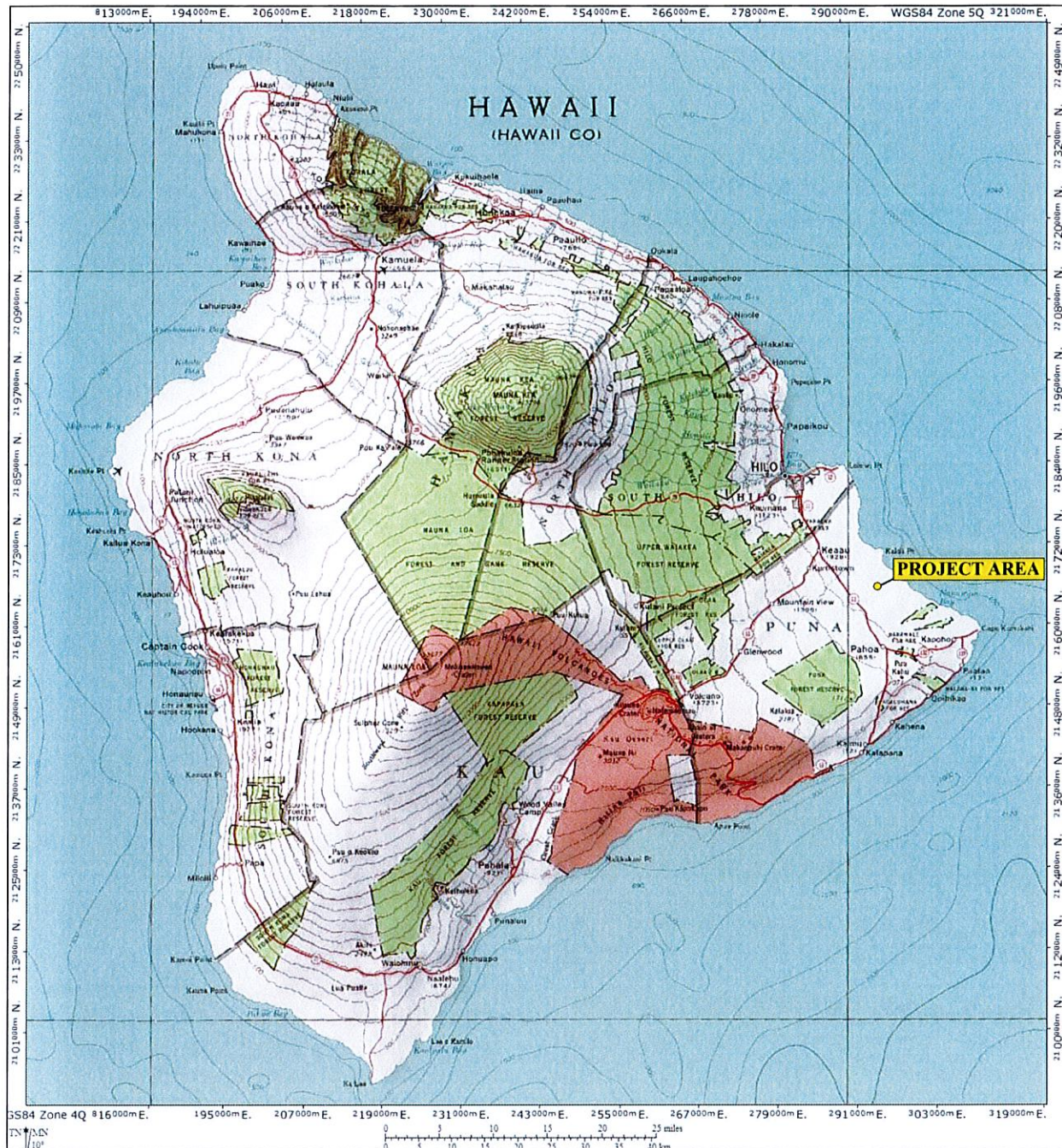
Enclosures:

Enclosure 1: Hawai'i Island Project Area Map
Enclosure 2: USGS TMK Project Area Map
Enclosure 3: USGS TMK Close-Up Project Area Map
Enclosure 4: Aerial Photo of Project Area
Enclosure 5: Northeast Hawai'i 1886 Map
Enclosure 6: Puna District Map
Enclosure 7: Previous Archaeological Studies Map
Enclosures 8 through 11: Project Area Photographs

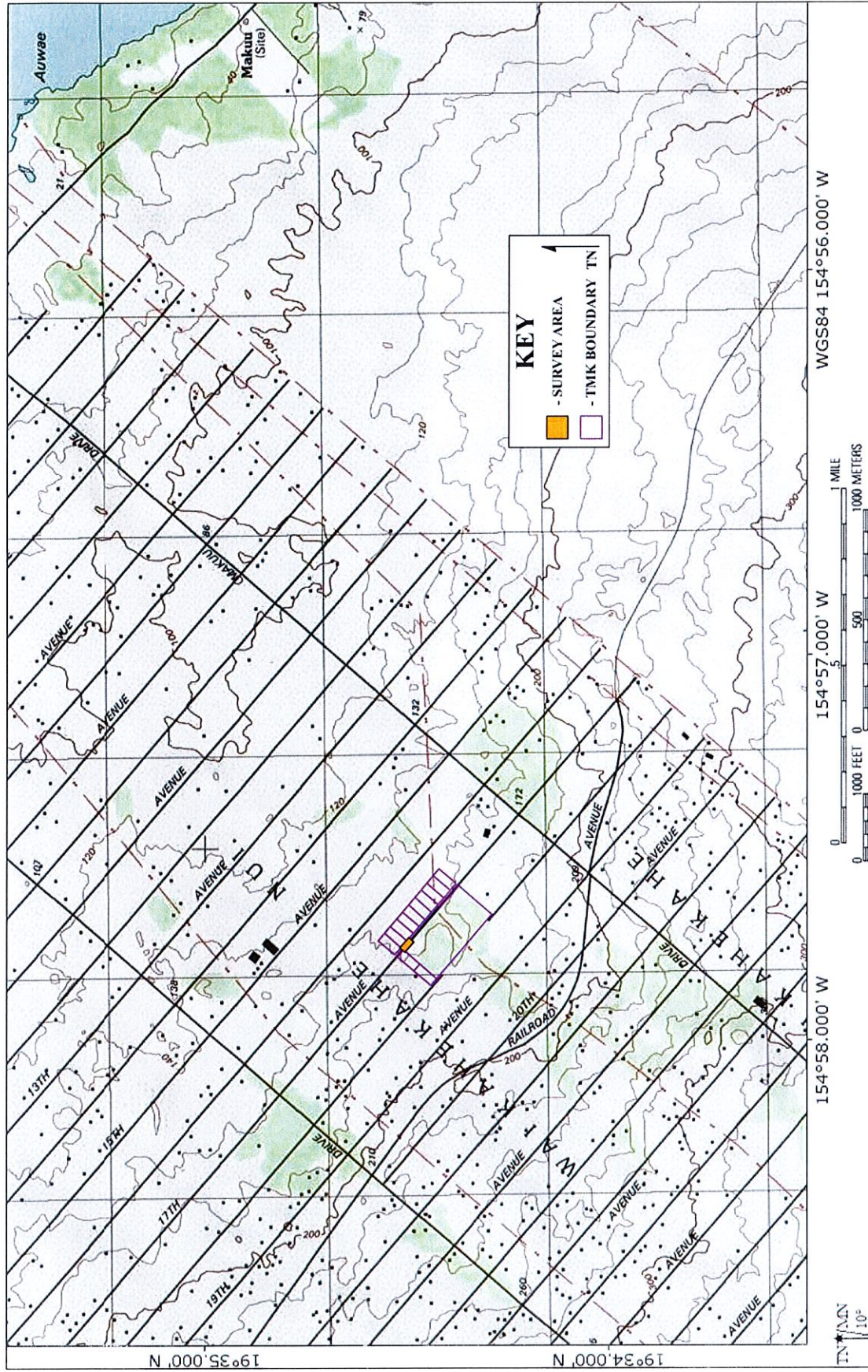
REFERENCES CITED

- Ellis, W.
1963 *Journal of William Ellis*. Honolulu Advertiser Publishing Co., Ltd, Honolulu.
- ESRI
2011 *Arc GIS Explorer*. Environmental Systems Research Institute, Redlands, Ca.
- Google Earth
2016 *Google Earth Imagery*. Google Earth. Mountain View, Ca.
- Hawai'i County Planning Department
2015 *Hawai'i County TMK Maps*. <http://www.hawaiiicounty.gov/tax-maps/current>.
- Komori, E. and I. Peterson
1987 *Cultural and Biological Resources Survey of the Poho 'iki to Puna Substation 69KV Transmission Corridor Kapoho to Kea 'au, Puna, Hawai'i Island*.
- National Geographic, Topo!
2003 *Seamless USGS Topographic Maps on CD-ROM, Hawai'i*. National Geographic Holdings, Inc. Washington, D.C.
- Sato, H., W. Ikeda, R Paeth, R Smythe, and M. Takehiro Jr.
1973 *Soil Survey of Island of Hawaii, State of Hawaii*. United States Department of Agriculture Soil Conservation Service. Washington D.C.
- Wall, W.
1886 Map of the Island of Hawai'i. Hawaiian Government Survey, Registered Map #1438.

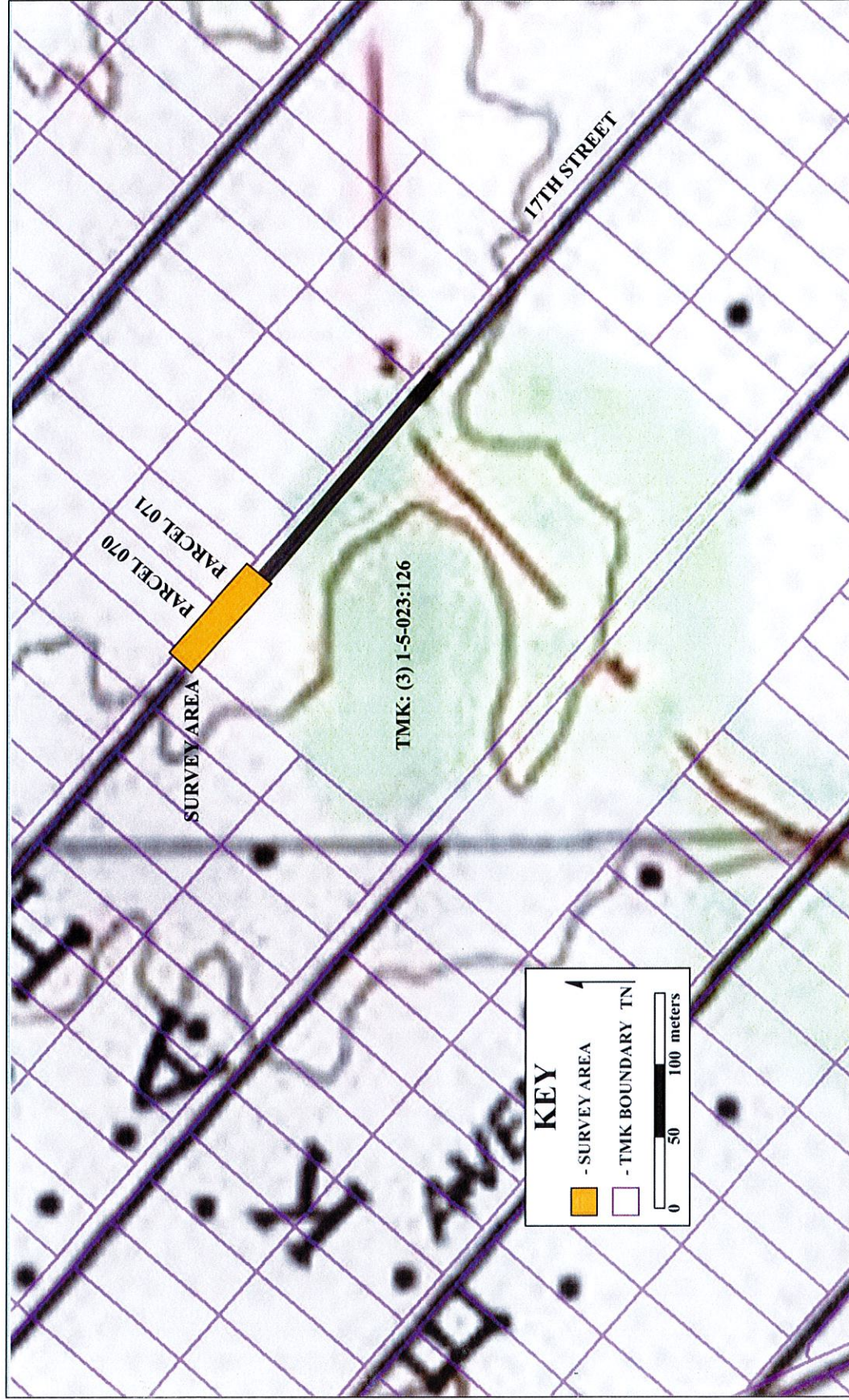
1927 Map of Puna Forest Reserve. Hawaiian Territory Survey, Registered Map #2753.
- Wolfe, E.W., and J. Morris
1996 Geological Map of the Island of Hawai'i. U.S.G.S. Miscellaneous Investigations Series. Department of the Interior, Washington, D.C.



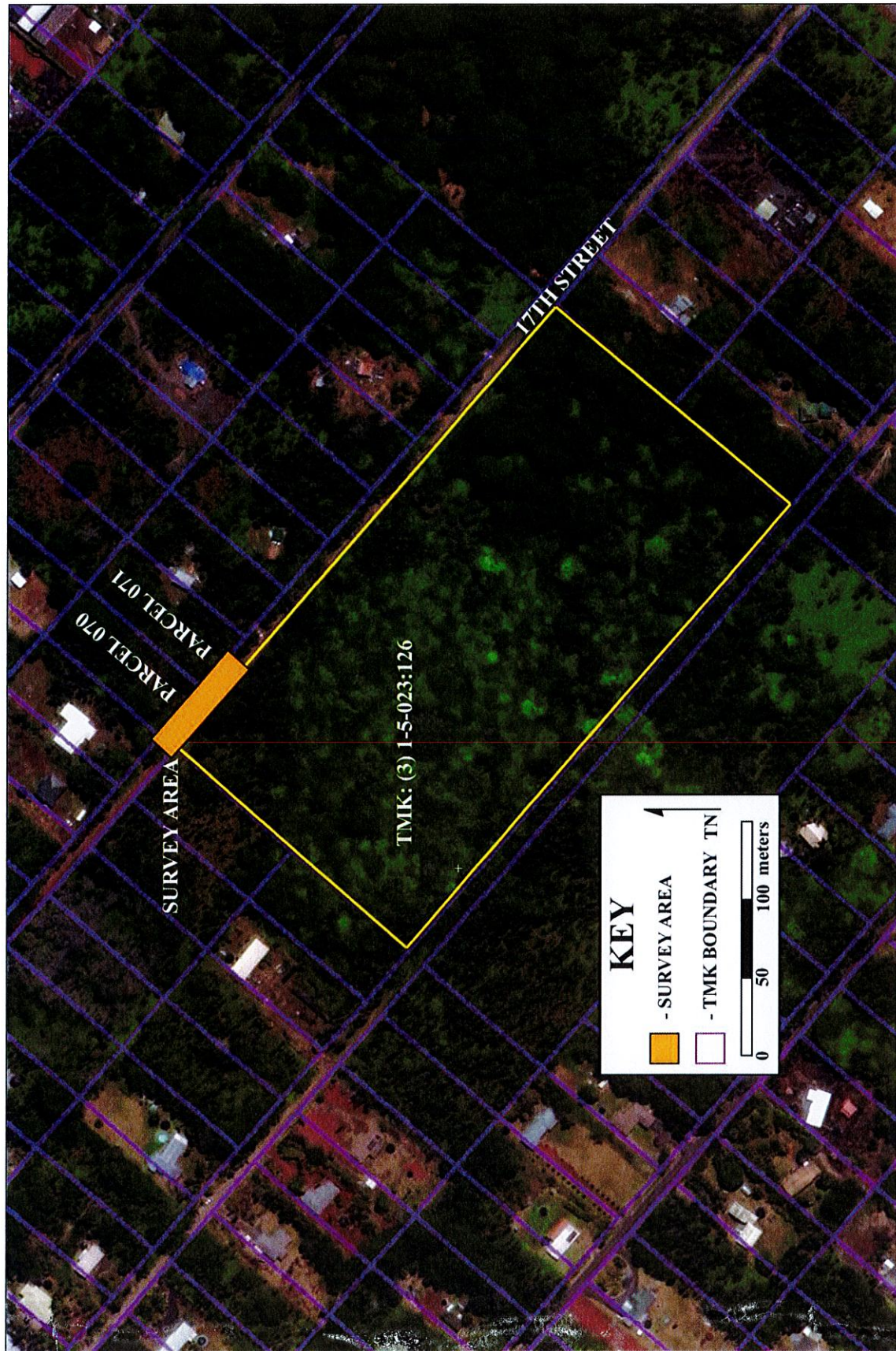
Enclosure 1: 5,500 K-Series Map of Hawai'i Showing Location of Project Area (National Geographic Topo!, 2003. Sources: National Geographic Society, USGS).



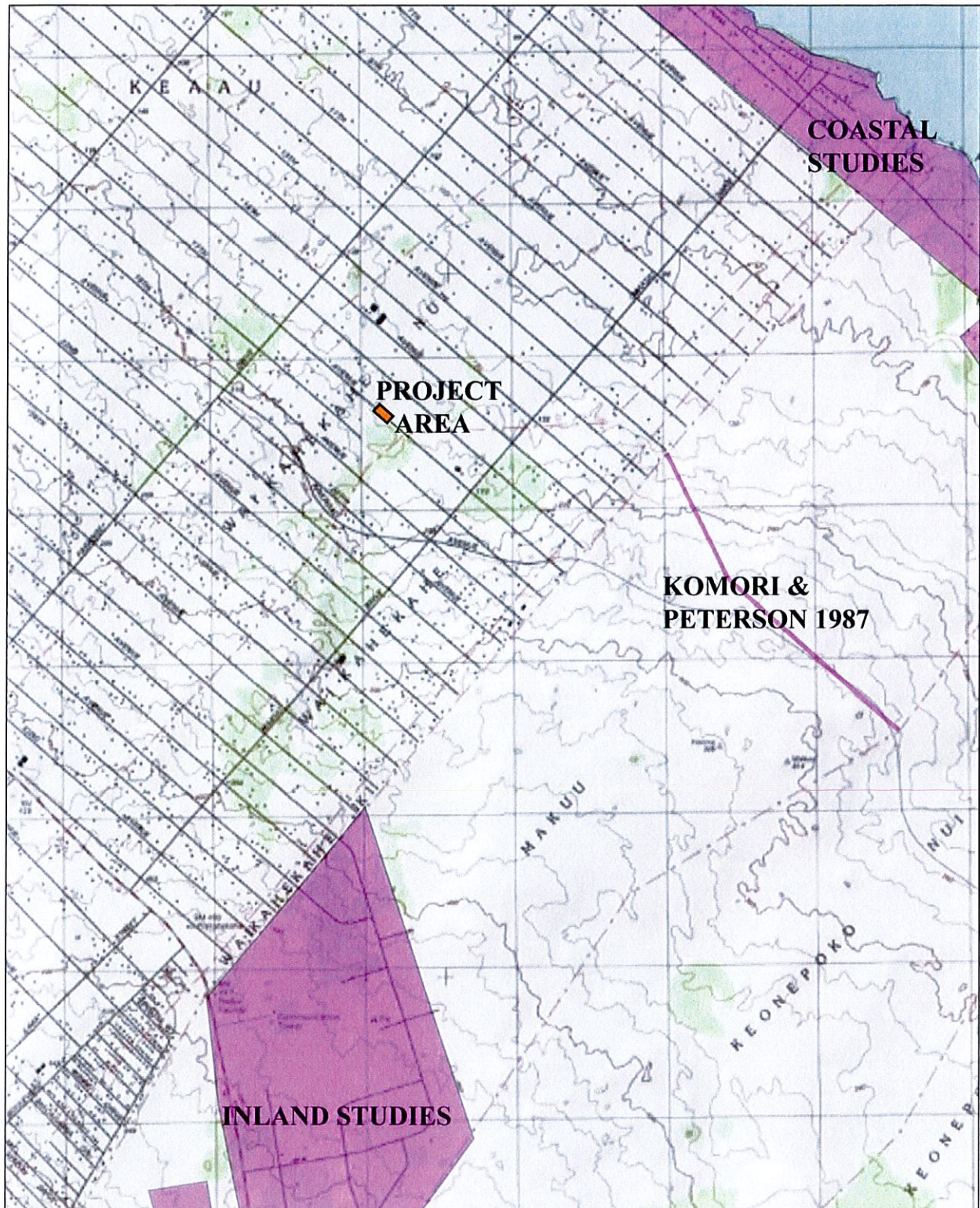
Enclosure 2: 7.5-Minute Series USGS Topographic Map (Pāhoia North Quad) Showing Location of Project Area (National Geographic Topo!, 2003. Sources: National Geographic Society, USGS).



Enclosure 3: 7.5-Minute Series USGS Topographic Map (Pāhoa North Quad) Showing Location of Project Area (ESRI, 2011).
 Sources: National Geographic Society, USGS Hilo Quadrangle).



Enclosure 4: Aerial Photograph Showing Location of Project Area (Yellow Boundary) (Google Earth 2020, Kea'au, HI, 5Q 294200m E, 2165440m N, 2013 Image).



Enclosure 7: 7.5-Minute Series USGS Topographic Map (Pāhoa North Quad) Showing Location of Project Area and Previous Archaeological Studies (ESRI, 2011. Sources: National Geographic Society, USGS Hilo Quadrangle).



Enclosure 8: Photograph of Project Area Vegetation Looking South.



Enclosure 9: Photograph of Project Area Vegetation Looking Southwest.



Enclosure 10: Photograph of Project Area Vegetation Looking Southeast.



Enclosure 11: Photograph of Project Area Vegetation Looking Northeast.