Archaeological Literature Review and Field Inspection of a 3.81-Acre Parcel ("Parcel 10") in Kalaeloa, Honouliuli Ahupua'a, 'Ewa District, O'ahu Island TMK: [1] 9-1-013:097

View of vacant parking lot in eastern portion of project area; view west

Prepared for
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EXHIBIT 16

Management Summary

This Archaeological Literature Review and Field Inspection (ALRFI) report was completed on behalf of Kalaeloa Ventures, LLC. The privately-owned (Hunt Communities Hawaii, LLC) project area, which consists of 3.81 acres, is in Kalaeloa, Honouliuli Ahupua‘a, ‘Ewa District, Island of O‘ahu. The subject parcel (TMK [1] 9-1-013:097) is within the boundaries of the former Naval Air Station, Barbers Point (NAS-BP) military (WW II-era) facility, just south (makai [seaward]) of the Kumuhonua Transitional Living Center and the Hawaii Army National Guard facilities. The Kalaeloa Airport (also known as John Rodgers Field), operated by the State of Hawai‘i (and once also part of the former NAS-BP), is directly to the south.

The objectives of this study included: (1) documentation and description of the parcel’s land-use history in the context of both its traditional Hawaiian character as well as its historic-period changes; (2) identification of any potential above-ground historic properties or component features; and (3) providing information relevant to the likelihood of encountering historically-significant cultural deposits in subsurface context during construction. This ALRFI is not an archaeological inventory survey (AIS) and did not include subsurface testing (excavation). The document may be used, however, to consult with the State Historic Preservation Division (SHPD) in compliance with Hawai‘i Revised Statutes (HRS) Chapter 6E-42 and Hawai‘i Administrative Rules (HAR) § 13-13-284. Archival research and analysis includes discussion of historic maps and surveys dating from as early as 1825, aerial images from as early as 1927, previous archaeological studies and findings, and other ephemera.

Field inspection, which included a 100% pedestrian survey of exterior portions of the project area that were not covered by buildings, structures or other facilities, resulted in the following conclusions: (1) One World War [WW] II-era architectural historic property (multiple Quonset Huts designated Building # 152) is located in the project area; its description, alteration history, and evaluation is being undertaken by a qualified architectural historian; (2) No other above-ground historic properties were identified. The ground surface in the project area has been completely altered (bulldozed and graded) multiple times over the years from at least as early as the WW-II era, and (at least in some portions) into modern times. Historical maps and aerial images indicate the earliest military alteration of the project area occurred sometime after 1927 and before 1943; and (3) No traditional Hawaiian sites, features or materials are located at the ground surface.

A program of archaeological monitoring in accordance with HAR § 13-13-279 should be implemented in support of subsurface ground disturbance in the project area. This mitigation will ensure appropriate treatment of any subsurface features, artifacts, midden or other cultural items, should such material be identified. In addition, this mitigation will ensure appropriate treatment of human skeletal remains, burials, or burial items, should such material be present. As per HAR § 13-13-279, an archaeological monitoring program will include an archaeological monitoring plan (AMP) that will contain design details of the areal and vertical extent of construction ground disturbance, as well as what types of construction activities are proposed for the project area. Specific details should be formalized in the AMP, in consultation with the SHPD-Archaeology Branch

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Section 1 Introduction

1.1 Project Background

This Archaeological Literature Review and Field Inspection (ALRFI) report was completed on behalf of Kalaeloa Ventures, LLC. The project area, which is privately-owned by Hunt Communities Hawaii, LLC, consists of 3.81 acres in Kalaeloa, Honouliuli Ahupua‘a, ‘Ewa District, Island of O‘ahu (Figure 1, Figure 2 and Figure 3). The parcel (TMK [1] 9-1-013:097) is generally bounded by Enterprise Ave. to the west, Randolph St. to the south, Monterey St. to the north and a light-industrial lot to the east.

The parcel is within the boundaries of the former Naval Air Station, Barbers Point (NAS-BP) military (World War II [WW II]-era) facility. In the 1990s, the NAS-BP facility was subject to an Environmental Impact Assessment (EIS) for its decommissioning (i.e., cleanup, disposal and reuse).

The project area is generally located in coastal Kalaeloa, just south (makai[1] [seaward]) of the Kumuhonua Transitional Living Center and the Hawaii Army National Guard facilities; the surrounding area is generally characterized by light-industrial and other commercial operations. The Kalaeloa Airport (also known as John Rodgers Field), operated by the State of Hawai‘i (and once also part of the former NAS-BP), is located directly to the south.

The objectives of this study include: (1) documentation and description of the parcel’s land-use history in the context of both its traditional Hawaiian character as well as its historic-period changes; (2) identification of any potential above-ground historic properties or component features; and (3) providing information relevant to the likelihood of encountering historically-significant cultural deposits in subsurface context during construction.

This ALRFI is not an archaeological inventory survey (AIS) and did not include subsurface testing (excavation). The document may be used, however, to consult with the State Historic Preservation Division (SHPD) in compliance with Hawai‘i Revised Statutes (HRS) Chapter 6E-42 and Hawai‘i Administrative Rules (HAR) § 13-13-284. Archival research and analysis includes discussion of historic maps and surveys dating from as early as 1825, aerial images from the mid-1900s, previous archaeological studies and findings, and other ephemera. Field inspection included a 100% pedestrian survey of exterior portions of the project area that were not covered by buildings, structures or other facilities.

The project proponent / landowner has requested this ALRFI to address “after the fact” permitting issues, and proposed projects that will involve permitting:

"After-the-Fact":

1. Removal of a 250-gallon tank by Swinerton (lessee)
2. Add an 8' high chain link fence along Enterprise Ave and Randolph St.
3. Grading included removal of 103 cubic yards of soil over a 4,181 sq. ft area, up to a depth of 8”.

[1] Hawaiian words are not italicized in this document because ‘Ōlelo Hawai‘i (the Hawaiian language) has been an official state language since the late 1970s.

Proposed work:

1. Removal and replacement of a 6' chain-link fence located at the back of the parcel.
2. Installation of an underground electrical line system to provide Hawaiian Electric Service to the building.

1.2 Environmental Setting

1.2.1 Natural Environment

This section describes the environmental and physiographic conditions in the project area. Some direct observations made during our field inspection on possible historic patterns of change are described where applicable. In addition, information in this section is also derived from well-known sources including Foote et al. (1972), Macdonald et al. (1983) and Juvik and Juvik (1998).

The landscape in and around the project area generally consists of limestone (i.e., lithified coral reef) overlying flows of the Wai‘anae volcanic series (Macdonald et al. 1983:423). Thin alluvial soils are frequently documented in Kalaeloa over limestone, but the current project area is makai of these alluvial deposits). Elevation in the project area is approximately 35 feet (10.7 meters). U.S. Department of Agriculture (USDA-NRCS n.d.) soil survey data shows that sediments in the project area consist exclusively of Coral outcrop (CR) (see also Foote et al. 1972) (Figure 4).

When exposed and not covered by historic or modern deposits, the surface of such coral outcrop, which are Pleistocene deposits, is typically characterized by numerous small dissolution “pit caves,” also known colloquially as “sinkholes.” Referring specifically to these natural features in the region where the project area is located, Ziegler (2002:97) writes:

> On the ‘Ewa Plain, rainwater has gradually dissolved **sinkholes** in more soluble portions of the exposed fossil reef. Typically, these sinkholes are bell-shaped in profile; the surface opening often is about 1 m (3.3. feet) or so in diameter, with the interior usually increasing to perhaps two or three times that. . .
>
> Originally, there were tens of thousands of these sinkholes exposed on O‘ahu; . . . At least 99 percent of these, however, have been filled or covered in the last century or so by agricultural and developmental projects, but attempts continue to permanently preserve at least a small area of the few remaining sinkholes. These cavities have been found to contain innumerable bones of endemic Hawaiian birds (many of the species prehistorically extinct) as well as many other scientifically and educationally important animal and plant remains.

The project area is in one of the driest regions of O‘ahu; mean annual rainfall is less than 20 inches (508 millimeters) (Juvik and Juvik 1998:56). Prior to the historic period, vegetation in and around the project area would have consisted of lowland coastal dry shrub and grassland. Today, however, due to historic and modern human alteration of the landscape, the project area—which is almost entirely hardscaped with buildings, infrastructure and asphalt—contains very little vegetation; in addition to landscaping varieties of bushes and shrubs, there are also a variety of invasive grasses and weeds, koa haole (*Leucaena leucocephala*) and kiawe (*Prospis pallida*) (Figure 5 and Figure 6; and see Appendix).

1.2.2 Built Environment

A currently vacant parking lot is in the eastern third of the project area. The now closed Tamura's Market building is in the center. Swinerton Builders occupies the western portion of the subject parcel. Where not occupied by buildings and associated infrastructure and appurtenances, the project area is nearly entirely covered with asphalt and other hardscaping materials (etc., concrete walkways, concrete pads for shipping containers). One WW II-era architectural historic property (multiple Quonset Huts designated Building # 152) is located in the project area; its description and evaluation is being undertaken by a qualified architectural historian and is not included in this ALRFI report.

Figure 1. Portion of 1998 U.S. Geological Survey (USGS) topographic map (Barbers Point Quadrangle) with project area (base map source: ESRI's ArcMap 10.2.2)

Figure 2. Aerial image showing location of project area (base image source: ESRI's ArcMap 10.2.2)

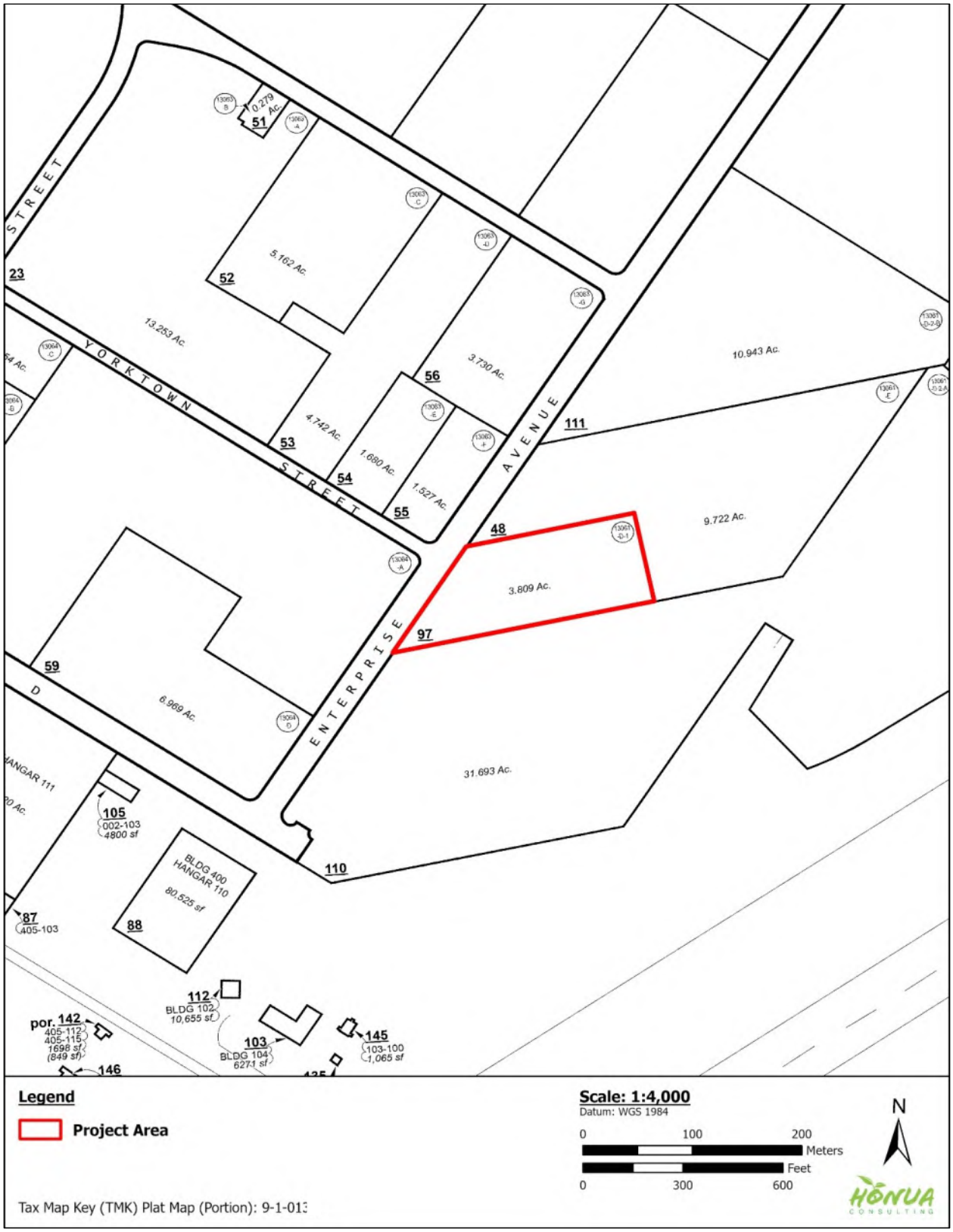

Figure 3. Tax Map Key (TMK) plat [1] 9-1-013 showing project area (parcel 097) location (source: Hawai‘i TMK Service n.d.)

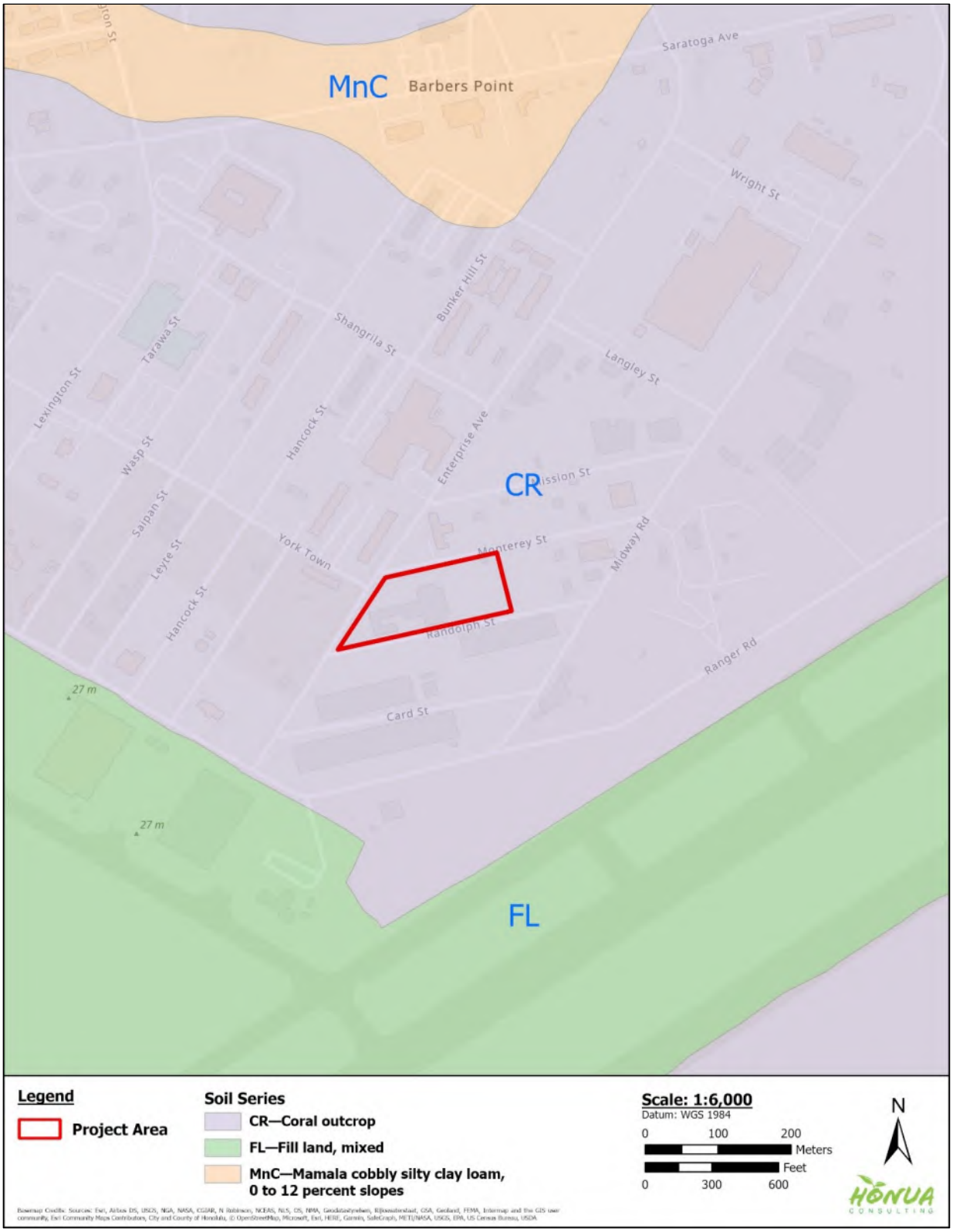

Figure 4. Soil series overlay showing anticipated soils in the project area (see text for discussion) (data source: Foote et al. 1972)

Figure 5. Project area overview from northwest corner; view east

Figure 6. Project area overview of northeastern corner of parcel; view south-southwest

Section 2 Cultural and Historical Context

This section includes a brief synthesis of relevant cultural and historical information related to the types and character of land uses in and around the project area, specifically, as well as Honouliuli Ahupua‘a, more generally, from pre-Contact times into the historic period and modern times. Parts of this section are based on a recent study of the cultural, historical and archaeological resources of the ahupua‘a of ‘Ewa, a publicly-available document.[2] All such material used below from Uyeoka et al. (2018) was written by the lead author (Monahan). The main objective here, primarily through the analysis of historical documents, maps and aerial images, is to provide a project area-specific picture of land use and modification over time.

Research was completed for this project using resources obtained from the SHPD’s library in Kapolei, as well as the on-line database of the Environmental Review Program (ERP) within the Office of Planning and Sustainable Development which publishes EIS and EA documents; and referencing Honua’s proprietary databases. We also utilized the following on-line sources to obtain cultural, historical, and archaeological data:

- OHA’s Papakilo database (http://papakilodatabase.com/main/main.php)
- OHA’s Kipuka database (http://kipukadatabase.com/kipuka/)
- Bernice P. Bishop Museum archaeological site database (http://has.bishopmuseum.org/index.asp)
- Bishop’s Hawaii Ethnological Notes (http://data.bishopmuseum.org/HEN/browse.php?stype=3)
- University of Hawai‘i-Mānoa’s digital maps (http://magis.manoa.hawaii.edu/maps/index.html)
- DAGS’ State Land Survey (http://ags.hawaii.gov/survey/map-search/)
- Waihona ‘Aina website (www.waihona.com)
- Digital newspaper archive “Chronicling America, Historic American Newspapers” (http://chroniclingamerica.loc.gov/lccn/sn82014681/)
- Hawai‘i State Archives digital collections (http://archives1.dags.hawaii.gov/)
- U.S. Library of Congress digital map collections (https://www.loc.gov/maps/)
- USGS Information Service, including digital map collections (https://nationalmap.gov/historical/index.html)
- AVA Konohiki’s website (http://www.avakonohiki.org/)

2.1 Hawaiian Cultural Landscape

As the largest ahupua‘a on the island of O‘ahu (at approximately 43,000 acres), Honouliuli (literally “dark bay,” Pukui et al. 1974) includes approximately 12 miles of marine coastline from Keahi Point in the east to Pili o Kahe in the west at the boundary with Nānākuli (and the district, or moku, of Wai‘anae) (Figure 7).

The general area within which the project parcel is located is known by its Hawaiian name as Kalaeloa, or “the long point” (ibid.). This descriptive, common place name in Hawaiian—both Maui and Moloka‘i also have a Kalaeloa—may in O‘ahu’s case refer to the relatively long distance one needed to walk over relatively hot, dry and barren country to get to the point (which is not actually long or particularly prominent).

[2] Available on-line at https://www.ksbe.edu/assets/site/special_section/regions/ewa/Halau_o_Puuloa_Full-Ewa-Aina-Inventory_Binder.pdf (see Uyeoka et al. 2018 in References Cited)

In addition to its marine shoreline, Honouliuli also has several miles of shoreline along the western margins of Ke-awa-lau-o-Puʻuloa (Pearl Harbor), the crown jewel of harbors in all of the Hawaiian Islands. Several loko (fishponds) and fish traps are located along this Puʻuloa (Pearl Harbor) coastline in Honouliuli, and these waters are famous for their pipi, or pearl oysters, and a wide variety of fish including deep-ocean species (Handy and Handy 1972:469).

The expansive plain immediately inland of the marine coast—including the project area, consists of karstic (limestone) lithified reef with a thin soil covering and innumerable pit caves (or sinkholes) containing brackish water. As described by the Bishop Museum's archaeologist McAllister (1933) in the 1930s (cited in Handy 1940:82), although appearing barren:

> It is probable that the holes and pits in the coral were formerly used by Hawaiians. Frequently the soil on the floor of the larger pits was used for cultivation, and even today one comes upon bananas and Hawaiian sugar cane still growing in them.

Moving inland from these limestone flats, soil conditions improve and alluvium deposited from the uplands via a series of gulches—the most prominent being Honouliuli proper—created planting areas for Hawaiian subsistence farmers. The main traditional loʻi kalo (irrigated taro) and settlement area was once around the mouth of Honouliuli Gulch, several miles northeast of the project area, where it empties into Puʻuloa.

Prior to the historic period and drilling for artesian wells, many fresh-water springs were located where the uplands meet the lower flats: at numerous "toe of slope" locations that were once typical pūnāwai (fresh-water springs) on Oʻahu. Dryland (non-irrigated) gardening areas would have been scattered all over the lower uplands above the current H-1 highway (Uyekoa et al. 2018).

Because of its large size, Honouliuli had a vast upland forest that extended 10–12 miles back from the seashore. This mauka (inland) region was a reliable source of native, endemic, and Polynesian-introduced plants including kukui, koa, ʻōhia, ʻiliahi (sandalwood), hau, kī (ti leaf), bananas, and many others. These resources provided not only food but also medicinal plants, waʻa (canoe) trees, and other needed items (e.g., for religious practices, hula, and so on) (ibid.)

A network of trails criss-crossed these uplands and connected them with the lower makai areas. Many named puʻu (hills and peaks), some with associated heiau (temples), are found throughout the mauka region of Honouliuli (see Figure 7). The well-known (and frequently reproduced) depiction of major trails in this region around 1800 by John Papa ʻĪʻī (1959:96) shows a major east to west-oriented trail inland (mauka) of Puʻu o Kapolei more than a mile north of the project area.

Figure 8, a portion of 1825 map by Malden shows a detail view in and around the project area and includes a section of mauka to makai-oriented trail about a mile to the east. This trail once connected the primary loʻi taro lands at the mouth of Honouliuli Ahupuaʻa with the shoreline southeast of the project area. An old freshwater pond—long since filled in by development makai (seaward) of the puʻu, is shown northwest of the project area below (makai of) Puʻu o Kapolei.

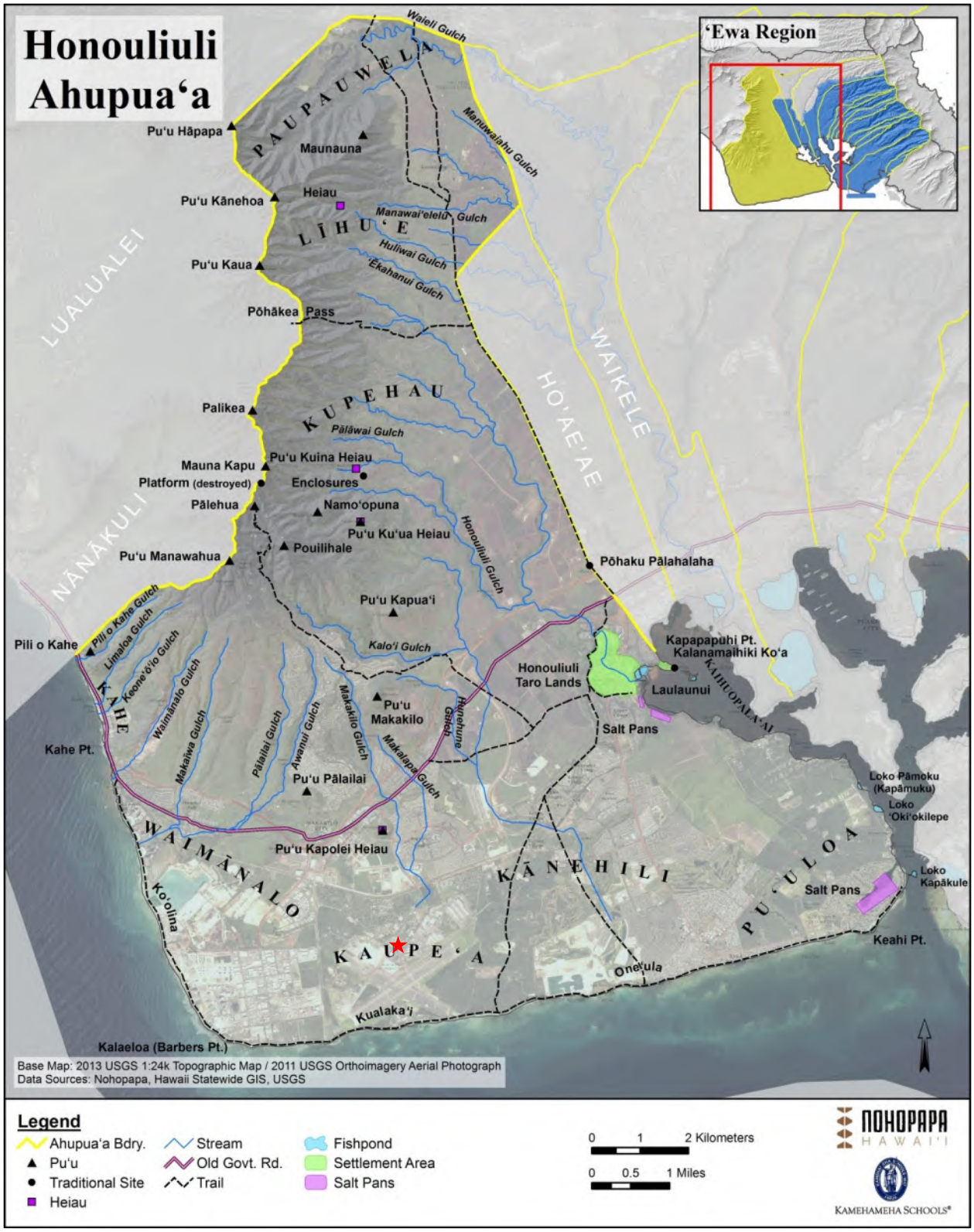

Figure 7. Place names, trails, wahi pana (legendary sites) and other cultural-resource features of Honouliuli; project area depicted as red star (base map source: Uyeoka et al. 2018:255)

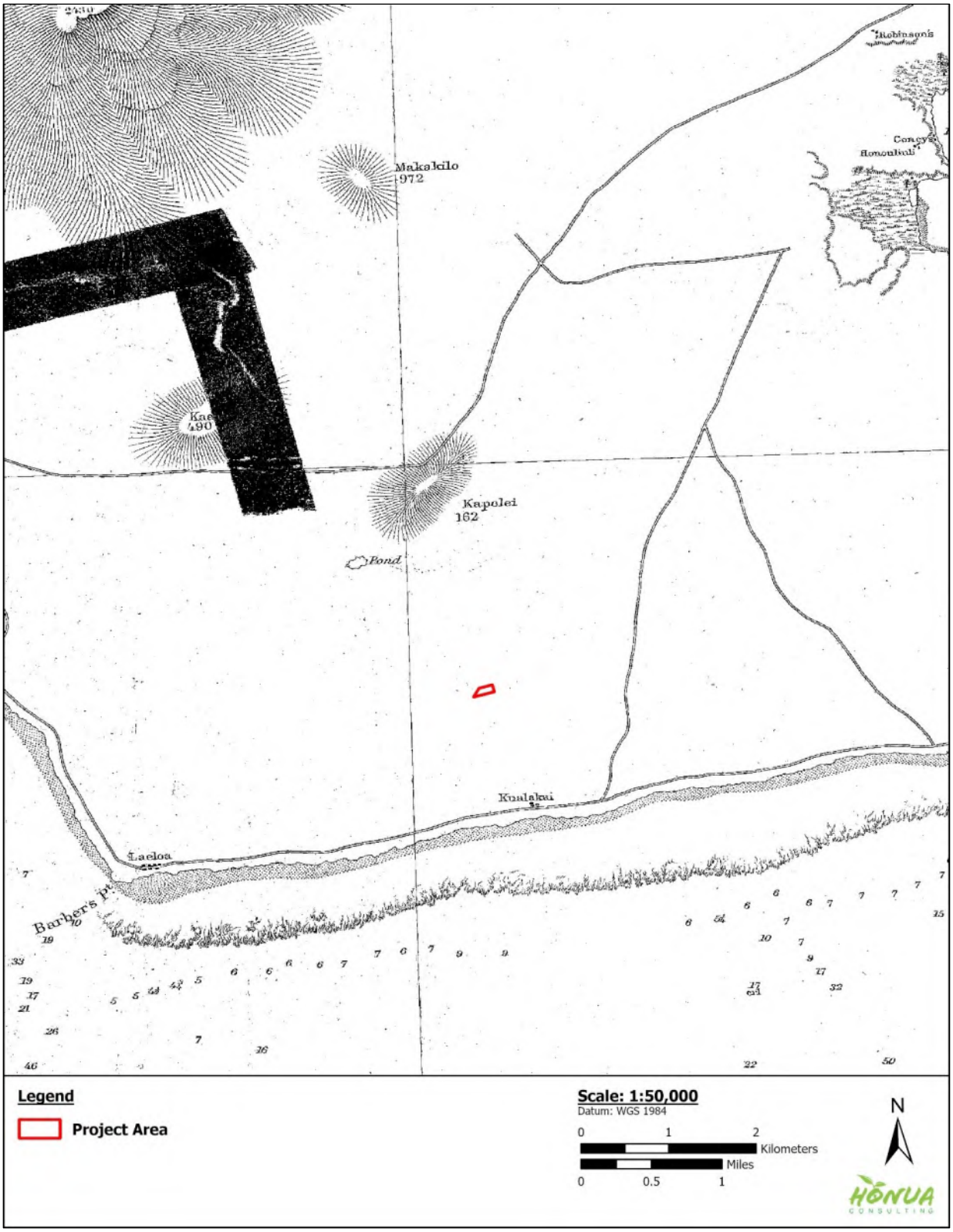

Figure 8. Portion of 1825 map by Malden (Registered Map 437) showing a section of mauka-makai trail less than a mile east of the project area (base map source: DAGS Land Survey Map Search, http://ags. hawaii.gov/survey/map-search/)

2.1.1 Moʻolelo (Oral-historical Accounts)

Kepā Maly, master of the Hawaiian language and chronicler of Hawaiian cultural resources, provided a new translation of the epic saga of the travels of Hiʻiaka-i-ka-poli-o-Pele (Hiʻiaka), the youngest sister of Pele, to and from Kauaʻi (Maly n.d.).

Maly's translation of "He Moolelo Kaao no Hiiaka-i-ka-poli-o-Pele" ("A Traditional Tale of Hiʻiaka who is Held in the Bosom of Pele") was originally published in the Hawaiian language newspaper Ka Hoku o Hawaii from 1924 to 1928. The following excerpts of his work include descriptions of place names and wahi pana of Honouliuli as well as mele (songs) and ʻoli (chants) with direct relevance to this place. In the excerpt below, references to Honouliuli are in bold:

He Moʻolelo Kaʻao no Hiʻiaka-i-ka-poli-o-Pele

The goddess Hiʻiaka journeyed from the island of Hawaiʻi to Kauaʻi, stopping on Maui, Molokaʻi, and Oʻahu, as she went to fetch the chief Lohiʻau-ipo (Lohi'au) from Hāʻena and return with him to Pele's domain at Kīlauea, Hawaiʻi. The following narratives come from the portion of the legend that describes the return journey to Hawaiʻi.

...Aloha ka hau o Kaʻala	Beloved is the dew of Kaʻala
ʻOia hau halihali ʻaʻala mauʻu nēnē	That dew which bears the fragrance of the nēnē grasses
Honi ai ke kupa o **Puʻuloa**	[fragrant dew which] Kissed the natives of **Puʻuloa**
He loa ka imina e ke aloha e…	One searches far for love... [January 18, 1927]

Preparing to depart from the village of the chiefess, Makua, Hiʻiaka elected to travel overland through Waiʻanae, to the heights of **Pōhākea**, and across the plain of **Honouliuli**. Hiʻiaka made preparations for Lohiʻau and Wahineʻōmaʻo to travel by canoe from Pōkaʻi to the landing at Kou (Honolulu). Before letting them depart, Hiʻiaka instructed her two companions...

> ...As you travel, you will arrive at a place where a point juts out into the sea. That will be **Laeloa** [Barbers Point]; do not land there. Continue your journey forward. As you continue your journey, you will see a place where the ocean lies calmly within the land. That will be **ʻEwa**; do not land there. As you continue your journey, you will reach a place where the mouth [of the land] opens to the sea (hāmama ana ka waha i ke kai). That is **Puʻuloa**, do not land there either. That is the entry way to **ʻEwa**... [January 25, 1927].

From the heights of **Pōhākea**, Hiʻiaka looked to the shores of **ʻEwa**, where she saw a group of women making their way to the sea. The women were going down to gather pāpaʻi [crabs] and limu [seaweed], and to gather the mahamoe, ʻōkupe [both edible bivalves], and such things as could be obtained along the shore.

. . .

Now, the famous fish of **ʻEwa** in those days when the wind blew because of conversations was the pipi [pearl oyster – It was believed that talking would cause a breeze to blow that

would, in turn, frighten the pipi. (cf. Pukui and Elbert 1986)]. Only when it was very calm could one go to catch the pipi. If anyone spoke while going to get the pipi, the breeze would cause rippling on the water's surface and the pipi would be hidden from sight. In this way, Hi'iaka had instructed Wahine'ōma'o and Lohi'au to be quiet like the women of 'Ewa who were going fishing. If one spoke, the angry winds would blow and bring misfortune... [February 8, 1927]

...Turning her gaze towards the island of Hawai'i, she could see the flames of Pele in the lehua forest of Hōpoe, and she chanted out:

Nani **Pālailai**, he anaina kapu na ka wahine	Beautiful is **Pālailai**, sacred assembly of the woman
Ke kūkulu nei wau i ka pahu kapu ka leo	I set up the drum of the sacred voice
O ka leo o ke kai ka'u e ho'olono e	The voice of the ocean is what I hear
Ua lono aku la ke kupa	The natives hear it[3]
Ua inu iho la nā manu i ke koena the wai noni	The birds drink the water caught in noni leaves[4]
Kūnewanewa a'e la nā 'ōpua i ka mālie	The billowy clouds pass in the calm
Pua o mai ke ahi o Hawai'i ia'u...	The fires of Hawai'i rise above me...

. . .

Hi'iaka then offered a chant to the women who had strung their garlands upon the plain which is burned by the sun.

E lei ana ke kula o **Keahumoa** ma'o i ka ma'o	The plain of **Keahumoa** wears the blossoms as its lei
'Ohu'ohu wale nā wahine kui lei o ke kanahele	Adorning the women who string garlands in the wild
Ua like no a like me ka lehua o Hōpoe	It is like the lehua blossoms of Hōpoe
Me he pua koili lehua ala i ka lā	Lehua blossoms upon which the sun beats down
Ka oni pua koai'a i ka pali	On the nodding koai'a flowers of the cliff
I nā kaupoku hale o **'Āpuku**	On the rooftops of the houses at **'Āpuku**
Ke ku no i ke alo o ka pali o **Pu'uku'ua**	Rising in the presence of the cliff of **Pu'uku'ua**
He ali'i no na'e ka 'āina	The land is indeed a chief
He kauwā no na'e ke kanaka	Man is indeed a slave
I kauwā no na'e wau i ke aloha	I am indeed a slave to aloha—love
Na ke aloha no na'e i kono e haele no māua	It is love which invites us two, come

[3] According to some traditions, the stormy ocean of Waialua could reportedly be heard in 'Ewa.
[4] In the past, after storms, forest birds could be seen in the lowlands drinking water in this manner.

E hele no wau a–	I come–

[‘Āpuku and Pu‘uku‘ua are both places situated on the upland plain of Honouliuli.]

. . .

Descending to the flat lands of **Honouliuli**, Hi‘iaka then turned and looked at **Pu‘uokapolei** and Nāwahineokama‘oma‘o who dwelt there in the shelter of the growth of the ‘ōhai [*Sesbania tomentosa*], upon the hill, and where they were comfortably refreshed by the blowing breezes. Hi‘iaka then said, “Pu‘uokapolei and Nāwahineokama‘oma‘o, do not forget me, lest you two go and talk behind my back and without my knowing, so here is my chant of greeting to you:”

Aloha ‘olua e **Pu‘uokapolei** mā	Greetings to you two **Pu‘uokapolei** and companion
E **Nāwahineokama‘oma‘o**	O **Nāwahineokama‘oma‘**o
E nonoho mai la i noho wale la	Set there, and dwelling
I ka malu o ka ‘ōhai	In the shade of the ‘ōhai
I ke kui lei kukui i ka lā	Stringing garlands of kukui in the day,
Lei aku la i ka pua o ka ma‘oma‘o	Adorning yourselves in the garlands of the ma‘oma‘o
Lei kauno‘a i ke kaha o **Ka‘ōlino**	Kauno‘a [*Cuscuta sandwichiana*] is the lei of the shores of **Ka‘ōlino**
He ‘olina hele e	There is joy in traveling

2.1.2 Other Mo‘olelo Related to the Project Area Environs

The level plains of Honouliuli—within which the project area is located—are thought to be the legendary “kula o Kaupe‘a” (plain of Kaupe‘a), the realm of the ao kuewa or ao ‘auwana (homeless or wandering souls). Kaupe‘a was the wandering place of those who died having no rightful place to go; the souls wandered “in the wiliwili grove” (Sterling and Summers 1978:36). According to the nineteenth century Hawaiian historian Samuel Kamakau (1961:47, 49), the spirits who wandered “on the plain of Kaupe‘a beside Pu’uloa...could go to catch pulelehua (moths or butterflies) and nanana (spiders)” in the hope of finding helpful ‘aumakua (family deities) who could save them.

The prolific Hawaiian language master, Mary Kawena Pukui, shared her personal experience with the ghosts on the plain of Kaupe‘a around 1910:

> A wide plain lies back of Keahi and Pu‘uloa where the homeless, friendless ghosts were said to wander about. These were the ghosts of people who were not found by their family ‘aumakua or gods and taken home with them, or had not found the leaping places where they could leap into the nether world. Here [on the plain of Honouliuli] they wandered, living on the moths and spiders they caught. They were often very hungry for it was not easy to find moths or to catch them when found.
>
> Perhaps I would never have been told of the plain of homeless ghosts if my cousin’s dog had not fainted there one day. My cousin, my aunt and I were walking to Kalae-loa, Barber’s Point, from Pu‘uloa accompanied by Teto, the dog. She was a native dog, not the so-called poi dog of today, with upright ears and body and size of a fox

> terrier. For no accountable reason, Teto fell into a faint and lay still. My aunt exclaimed and sent me to fetch sea water at once which she sprinkled over the dog saying, "Mai hana ino wale ʻoukou i ka holoholona a ke kaikamahine. Uoki ko ʻoukou makemake ʻilio." "Do not harm the girl's dog. Stop your desire to have it." Then with a prayer to her ʻaumakua for help she rubbed the dog. It revived quickly and, after being carried a short way, was as frisky and lively as ever.
>
> Then it was that my aunt told me of the homeless ghosts and declared that some of them must have wanted Teto that day because she was a real native dog, the kind that were roasted and eaten long before foreigners ever came to our shores (Pukui 1943:60-61).

Along the coast, just in front of the current Kalaeloa Airport, there is a place called Kualakaʻi (see Figure 7), and there used to be a pūnāwai there called Hoakalei. According to Maly (n.d.:15), additional information about this spring and environs is found in the legendary series titled "Nā Wahi Pana o ʻEwa" (The Famous Places of ʻEwa), which ran in the Hawaiian language newspaper Ka Loea Kālai ʻĀina (c. 1900). It described two "strange" women who lived on the plain called Puukaua, beyond Puʻukapolei, toward Waiʻanae. Once, after going down to Kualakaʻi on the coast to gather ʻaʻama crabs, pipipi (a type of univalve marine shell), and limu (seaweed), they failed to return home before morning light, and were turned into a single pillar of stone (Sterling and Summers 1978:39).

2.2 Historic Period

2.2.1 Overview

In general, starting around the turn of the eighteenth to nineteenth century, and continuing throughout the nineteenth century, life on Oʻahu was drastically changed with the arrival and increasing influence of foreign political, economic, and ideological systems. As a result, traditional Hawaiian settlement patterns, subsistence, and religious institutions were largely abandoned. By the late 1800s, nearly the entire ahupuaʻa of Honouliuli had been purchased by a few large landowners and developed into cattle ranches, sugar cane fields, sisal farms, and other agricultural concerns (Tuggle and Tomonari-Tuggle 1997; Gosser et al. 2011). Military development of the region began in the late 1800s with the construction of the Barbers Point Lighthouse and accelerated significantly in the early 1900s with the creation of several large bases including Naval Air Station Barbers Point (NAS-BP), Hickam Field, and Pearl Harbor. Since the closing of NAS-BP in the 1990s, small industry and other commercial, government, and residential development have replaced military infrastructure (Gosser et al. 2011).

2.2.2 Early 1800s

As stated above, ʻĪʻī's well-known description and mapping of the old, traditional Hawaiian trails of leeward Oʻahu (ʻĪʻī 1959:96) shows a major trail passing by the project area about a mile to the east. Malden's 1825 map shows this and other nearby Hawaiian trails, but none of them are closer than about a mile from the project area (see Figure 8). These trails data, and other information such as the location and distribution of prime loʻi kalo (irrigated taro) lands (several miles to the northeast of the current project area), and the location of early Christian missions (closer to Puʻuloa, or Pearl Harbor), suggest the project area vicinity—which lacked potable

water and was extremely arid—was not a prime location for Hawaiian settlement or activity (Hammatt and Shideler 2012a). This is not to say the area was abandoned or lacked human occupation, because there is evidence in the vicinity of the project area—as well as along the coastline to the south—that Hawaiians were using this area in traditional times (ibid.).

With the arrival of foreigners in the area, the landscape of Honouliuli, the ʻEwa plains, and other adjacent areas (e.g., the Waiʻanae Mountain slopes) was largely denuded by the removal of sandalwood trees (for the Chinese market) and other trees (for construction in Honolulu), and by the introduction of large domesticated ungulates (e.g., goats, sheep and cattle) that destroyed native vegetation, replacing it with exotic, pest species such as koa haole (*Leucaena leucocephala*), guava (*Psidium guajava*), lantana (*Lantana camara*), and many invasive and aggressive grasses (ibid.).

2.2.3 Middle 1800s

Beginning in the 1840s, private property was introduced via formation of the Board of Commissioners to Quiet Land Titles, and the adoption of the Māhele (i.e., the division of Hawaiian lands). In 1845, King Kamehameha III waived his right to full authority over all lands; he portioned out some for his personal use (crown lands), and divided the rest into government land, land for the aliʻi (chiefs) and konohiki (land overseers), and land for commoners (kuleana land) (Alexander 1891; Board of Commissioners 1929; Moffat and Fitzpatrick 1995). After this time, Land Commission Awards (LCAs) were granted to commoners as kuleana parcels for fee ownership. LCAs record who resided on the land and how the land was used. There are no kuleana (commoner) parcels, nor claims, in or near the project area. About 100 claims were made in the ahupuaʻa of Honouliuli, but these were all located several miles northeast of the project area (near the mouth of Honouliuli Stream and other locations along the shore of Puʻuloa [Pearl Harbor]). The project area was part of Aliʻi Nui (highly-ranked elite) Land Commission Award 11216:8 (Royal Patent 6071) to Kekauʻōnohi (great granddaughter of Kekaulike, King of Maui, and a close relative of Kamehameha I), which means there are no records or surveys of middle nineteenth century land use in or near the project area (because such documentation was not required of Aliʻi Nui awards). Kekauʻōnohi's deed to all unclaimed land within the ahupuaʻa was for a total of 43,250 acres (Board of Commissioners 1929).

When Kekauʻōnohi died in 1851, her holdings passed on to her husband (Haʻalelea) and his family. Upon her death on June 2, 1851, all her property was passed on to her husband and his heirs. When Haʻalelea died, the property went to his surviving wife, who then leased it to James Dowsett and John Meek in 1871 for ranching operations (Hammatt and Shideler 2012a).

In 1877, James Campbell purchased most of the Honouliuli Ahupuaʻa. He soon began drilling for potable water in Honouliuli, and, within about a decade, was supplying water to Honolulu. By 1881, Campbell also ran a successful cattle ranching operation in Honouliuli (ibid.).

In 1889, Campbell leased his property to Benjamin Dillingham, who founded the Oʻahu Railway & Land Co. (O.R. & L.) in 1890. Dillingham then subleased all land below 200 feet elevation to William Castle, who started the ʻEwa Plantation Co. for sugar cane cultivation. Other of Dillingham's lands at higher elevation was used by another sugar cane operation, Oʻahu Sugar Co. (ibid.). ʻEwa Plantation Co. was incorporated in 1890 and continued in operation into modern times. The ʻEwa Plantation Co.'s farming practices caused soil erosion from the uplands onto the coral plain (ibid.).

2.2.4 Early 1900s to Modern Times

Figure 9, a portion of 1902 map, shows the project area located on the "Coral Plain" and near a sisal plantation (to the northeast), which refers to Dillingham's Hawaiian Fiber Company. This map also depicts the nearby O.R. & L. to the north, and a north to south-oriented road (probably for horse-drawn wagons) to the west. No structures are depicted within or near the project parcel at this time.

Figure 10, a portion of 1913 map, shows rock walls related to the sisal plantation east of the project area. The main line of the O.R. & L. railroad is depicted as located just to the north of the project area. A 1919 map ("War Department Fire Control map, Barbers Point quadrangle," not reproduced here) shows the same basic picture as the 1913 map. No structures are depicted within the project parcel at this time, but a cross-slope trail or road is shown just to the south.

Figure 11 and **Error! Reference source not found.**, portions of a 1927 map and aerial image, respectively, show little to no change in and immediately around the subject parcel, which is still undeveloped at this time.

Figure 13 is a portion of 1939 map of the Ewa (sugar cane) Plantation Company's fields. This map shows that sugar cane fields were located north of the project area, but not within it. The earliest U.S. military structures (e.g., the Mooring Mast to the northeast) and infrastructure (e.g., U.S. Army Road to the south) in the area are depicted. The project area is within an expansive area of coastal and near-coastal Honouliuli labelled "Coral Reef."

By the early 1940s, some sugar cane fields that extended south (makai) of the O.R. & L. railway line (still north of the project area) had been developed over by the U.S. military. Hammatt and Shideler (2012a:25, 28) describe the changes that took place around this time in and near the project area:

> Major land use changes came to western Honouliuli when the U.S. Military began development in the area. Military installations were constructed both near the coast and in the foothills and upland areas. Barbers Point Military Reservation (a.k.a. Battery Barbers Point from 1937–1944) was located at Barbers Point Beach, and used beginning in 1921 as a training area for firing 155 mm guns . . . Also within the vicinity was the Camp Malakole Military Reservation (a.k.a. Honouliuli Military Reservation), used from 1939, and the Gilbert Military Reservation, used from 1922–1944. The largest and most significant base built in the area was the Barbers Point NAS, which operated from 1942 into the 1990s. It housed numerous naval and defense organizations, including maritime surveillance and anti-submarine warfare aircraft squadrons, a U.S. Coast Guard Air Station, and the U.S. Pacific Fleet.
>
> In 1930, the U.S. Navy leased 206 acres of land on the 'Ewa Plain from the Campbell Estate for the purpose of building a mooring mast for the dirigible *Akron*. At the expiration of the lease in late 1939 or early 1940, the Navy acquired over 3,500 acres of land from the Estate. In 1941, the Marine Corps Ewa strip was completed on a portion of the land to serve as an auxiliary airfield for the Navy's Ford Island Facility. The Ewa Marine Corps Air Station was extensively damaged during the Japanese attack on Pearl Harbor on December 4, [sic] 1941. During

> World War II, the design capacity of the station was changed. The major construction of Barbers Point was completed from 1941 to 1945.

A portion of 1943 map (Figure 14) shows the project area environs in a state of active development by the military, but no structures yet in the subject parcel. NAVFAC (2015) states that one or more of the Quonset Huts designated Building # 152 were built in or just before 1943, although these are not shown on this map.

A 1951 U.S. Naval Air Station map (Figure 15) and aerial image (Figure 16) show significant post-WW II development in and near the project area, including some buildings and resources that still remain in some form or another on the property, including an earlier configuration of the Quonset Huts designated Building # 152, which have been altered and reconfigured over the years (NAVFAC 2015). This WW II-era historic property is being described and evaluated by a qualified architectural historian and is not included further in this ALRFI report.

A 1953 topographic map (Figure 17) does not add much to the information from the 1951 map and aerial image.

Later depictions of the project area—in a 1968 aerial image (Figure 18) show additional build-out of portions of the current project area.

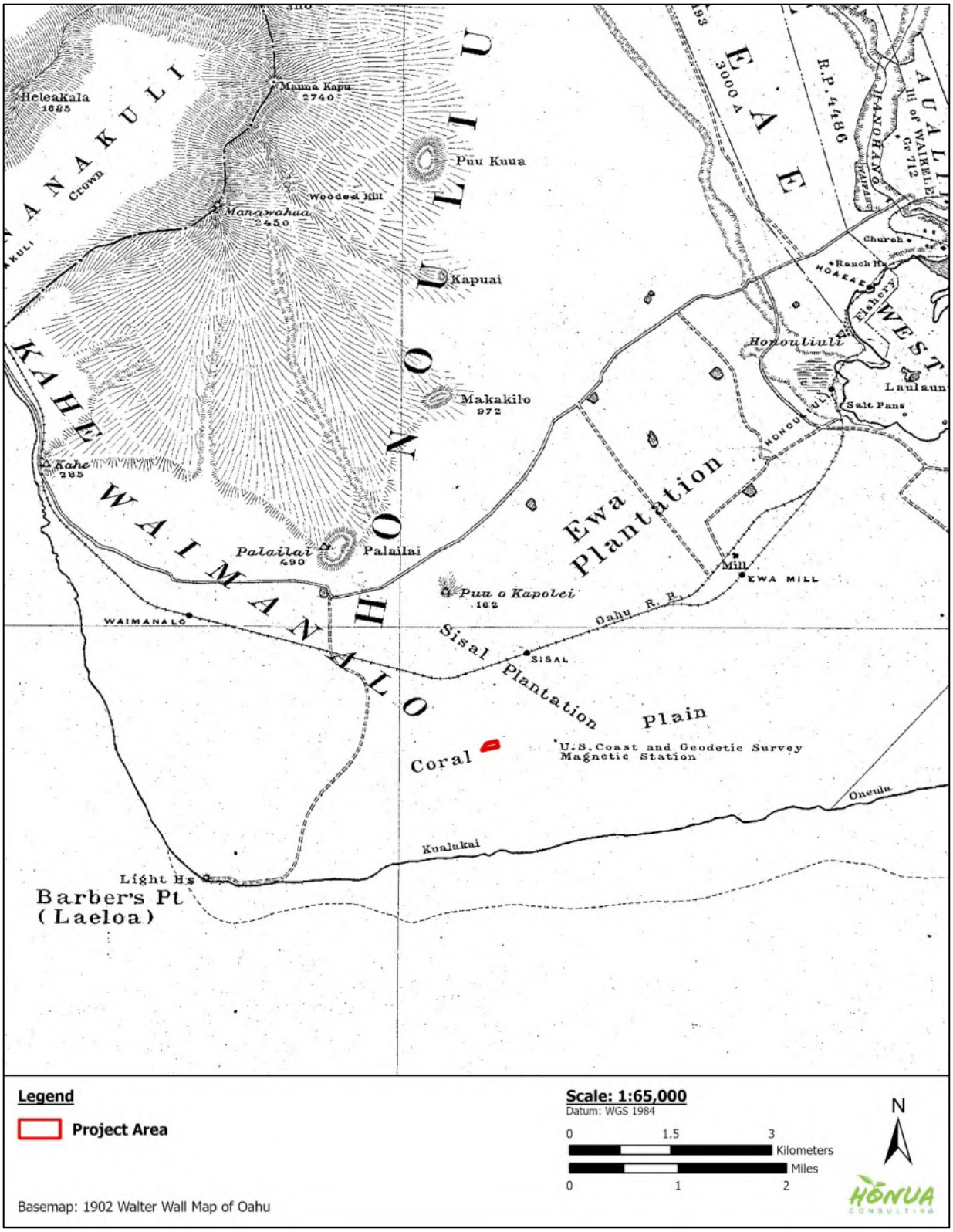

Figure 9. Portion of 1902 map by Wall/Donn (Registered Map 2374) showing turn-of-the-century" developments near the project area (base map source: DAGS Land Survey Map Search, http://ags. hawaii.gov/survey/map-search/)

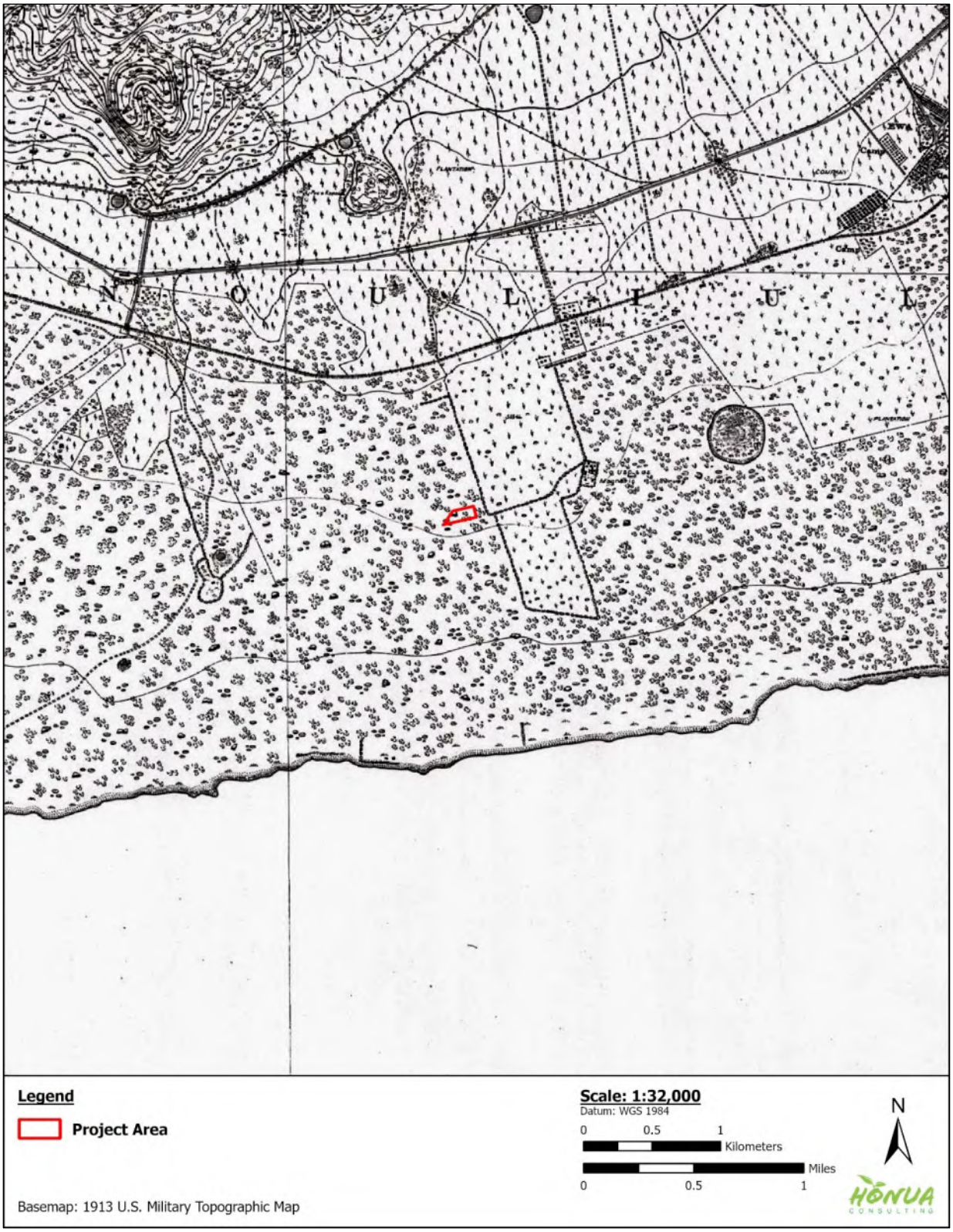

Figure 10. Portion of 1913 topographic map shows project area adjacent to commercial sisal growing operation (to the east) (base map source: University of Hawai‘i-Mānoa’s digital maps, http://magis.manoa.hawaii.edu/maps /index.html)

Figure 11. Portion of 1927 topographic map with project area location (base map source: University of Hawai‘i-Mānoa’s digital maps, http://magis.manoa.hawaii.edu/maps/index.html)

Figure 12. Portion of 1927 aerial photograph with project area location (base image source: University of Hawai‘i-Mānoa’s digital maps, http://magis.manoa.hawaii.edu/maps/index.html)

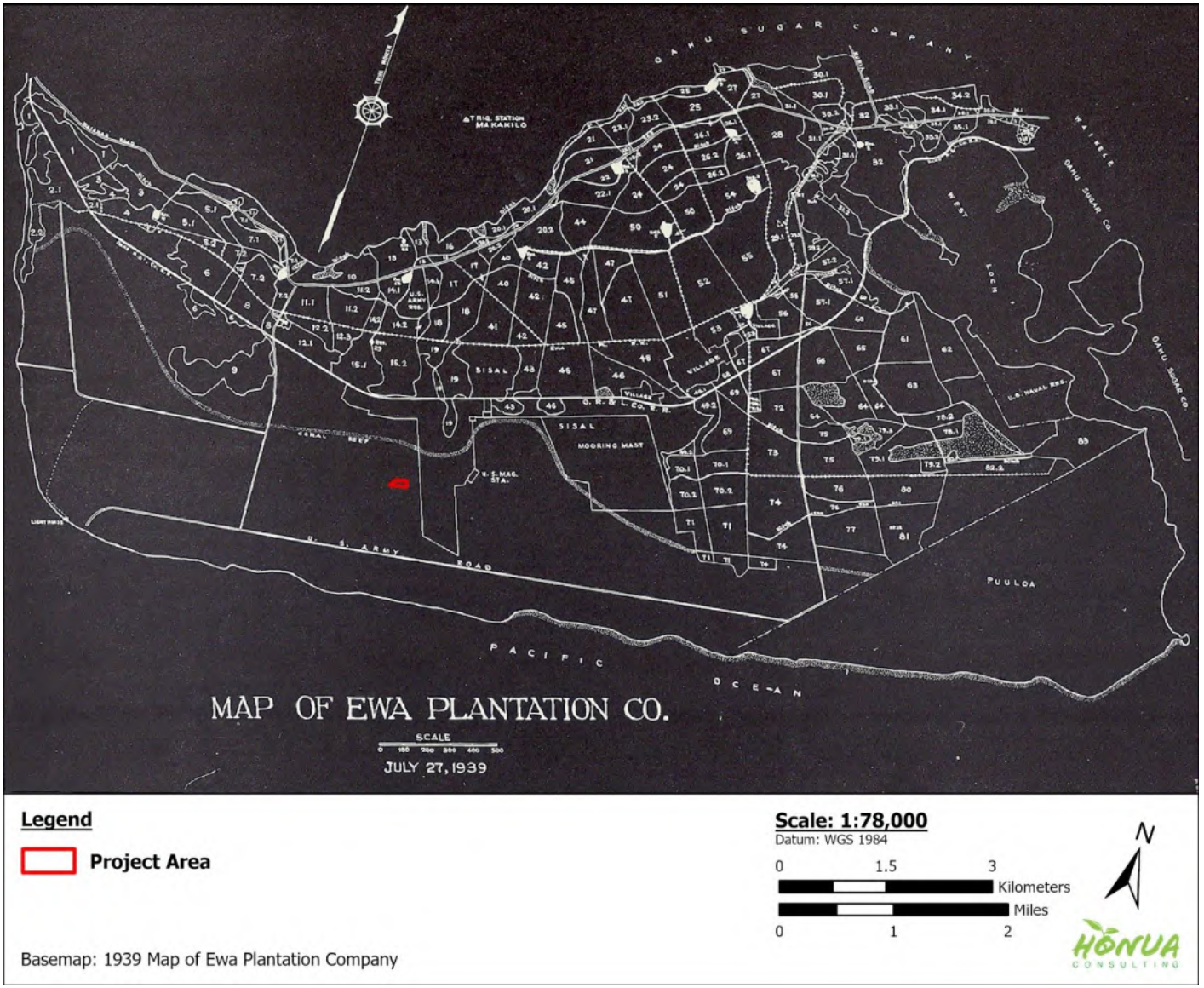

Figure 13. Detail of 1939 Ewa Plantation Co. map showing the project area in an area of commercial sisal production, and adjacent to sugar cane field #s 19 & 43 (base map source: Condé and Best 1973:285)

Figure 14. Portion of 1943 topographic map with project area location (base map source: University of Hawai‘i-Mānoa’s digital maps, http://magis.manoa.hawaii.edu/maps/index.html)

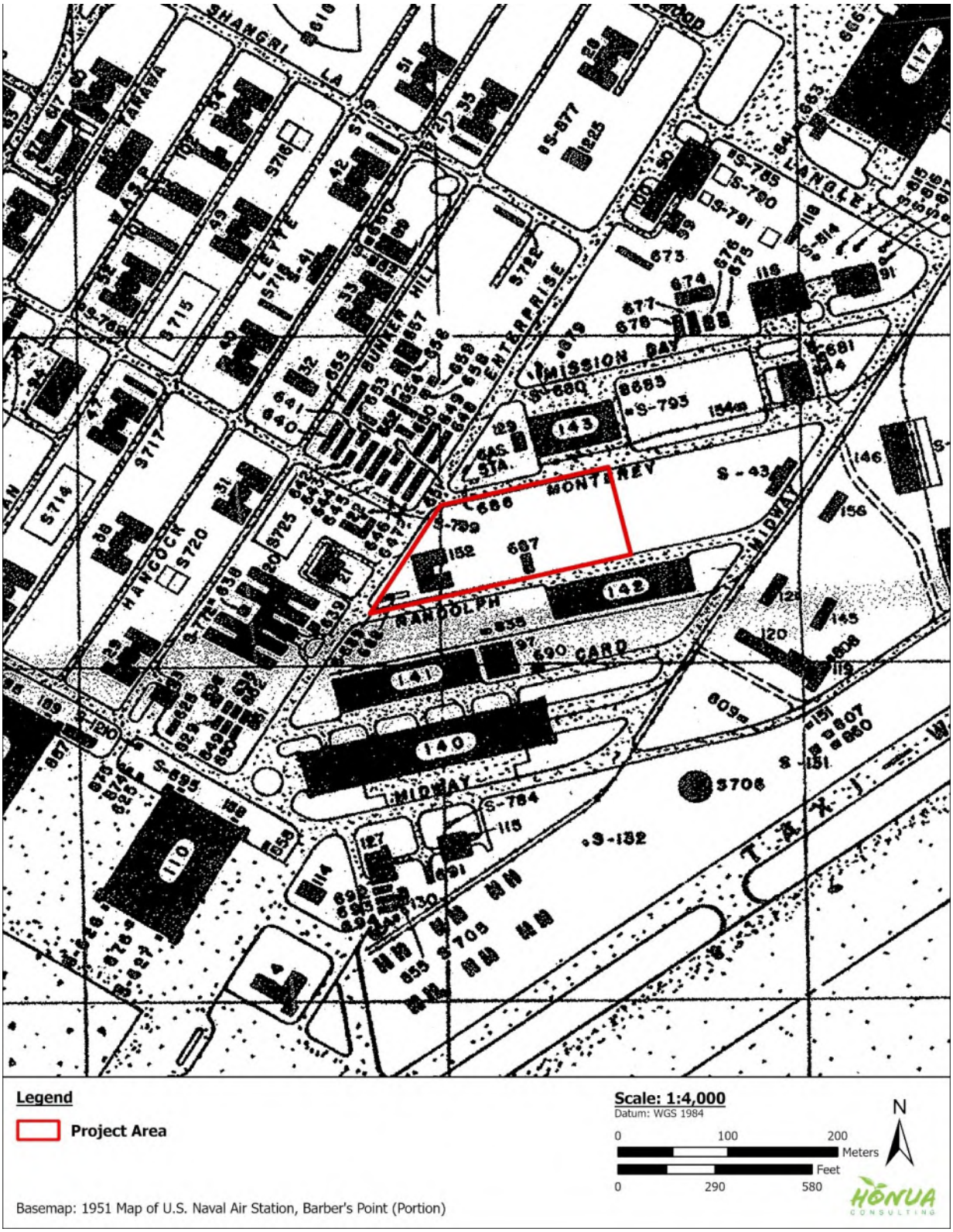

Figure 15. Portion of 1951 "Map of U.S. Naval Air Station, Barber's Point, Honouliuli, Oahu, T.H.," showing project area location (courtesy of NAVFAC)

Figure 16. Portion of 1951 aerial photograph with project area location (base image source: University of Hawai‘i-Mānoa’s digital maps, http://magis.manoa.hawaii.edu/maps/index.html)

Figure 17. Portion of 1953 topographic map with project area location (base map source: University of Hawai‘i-Mānoa’s digital maps, http://magis.manoa.hawaii.edu/maps/index.html)

Figure 18. Portion of 1968 aerial photograph showing project area location (base image source: University of Hawai‘i-Mānoa’s digital maps, http://magis.manoa.hawaii.edu/maps/index.html)

Section 3 Previous Archaeological Studies

In this section, we summarize previous archaeological studies in order to reconstruct human use and modification of the land in and near the project area from pre-Contact times into the historic period. The main purpose of presenting this information is to develop predictive data about the types and distribution of archaeological historic properties and their component features we expected to encounter; and to assist interpretation of any new findings. This section does not include architectural historic properties.[5]

Table 1 is a summary of previous archaeological studies and results in and near the project area. Figure 19 and Figure 20 summarize and depict the results of previous archaeological studies in and near the project area.

3.1 Overview Statement

Previous archaeological studies show there are no above-ground archaeological sites in the subject project area, which was completely cleared of surface sites (i.e., grubbed, graded and bulldozed) starting in the middle twentieth century. The entire ground surface of the project area was modified by military development starting after 1927 (see Figure 11 and Figure 12) and before 1943 (see Figure 14).

This documented disturbance of the project area's ground surface, and to some unknown depth portions of its subsurface, does not preclude the possibility of there being archaeological sites or component features (e.g., pit caves, also known as sinkholes, that may contain traditional Hawaiian sites) in subsurface context; such sites have been documented in subsurface context by numerous studies throughout the limestone (or coral) plain of Kalaeloa.

3.2 Archaeological Historic Properties within Project Area

With the exception of Building # 152, there are no previously-identified historic properties in the project area. The project area was included in the original survey of the greater military base property (Tuggle and Tomonari-Tuggle 1997), but no archaeological resources were identified in the subject parcel.

3.3 Archaeological Historic Properties within ½-Mile of Project Area

As depicted in Figure 20, the closest archaeological historic properties to the project area are nearly 0.5 mile to the north, between Saratoga and Roosevelt avenues. A cluster of several archaeological sites (State Inventory of Historic Places [SIHP] # 50-80-12-1728, 4649, 4650, 4651, 4652 and 4653) was identified in the early 1990s. SIHP #s 1728, 4649 and 4652 are about 0.5 mile away (the others are more distant to the north). SIHP # 1728, a coral-rock (sisal plantation) wall was first recorded by Haun (1991). The other sites, identified by Landrum and Schilz (1993), include another section of sisal wall (SIHP # 4649) and a traditional Hawaiian

[5] One WW II-era architectural historic property (multiple Quonset Huts designated Building # 152) is located in the project area; its description and evaluation is being undertaken by a qualified architectural historian.

habitation and gardening complex consisting of multiple features (SIHP # 4652). Excavations at SIHP # 4652 (and at SIHP #s 4650 and 4651) yielded midden consisting of marine shells (gastropods and bivalves), crustacean, and fish bone. Land snails, medium-size mammals including *Sus scrofa* (pig), *Rattus* sp. (rat), and *Mus musculos* (mouse), unidentified bird bones, kukui (*Aleurites mollucana*), unidentified seeds, wood bark, and wood charcoal were also collected. Artifacts collected consisted of worked bone pieces (pick tip, and fishhook shank), a basalt hammerstone, a basalt core, a basalt flake, a limestone core, a coral scraper and file/abrader, and fire-affected basalt.

3.4 Other Archaeological Studies within ½-Mile of Project Area

Nearby archaeological studies by Cleghorn and Kahahane (2009), Vernon and Desilets (2013) and Rivera and Monahan (2016), all of which included either subsurface excavation or observation of subsurface excavations, did not identify any significant archaeological historic properties or component features. Pits caves ("sinkholes") were observed in this studies, but none contained cultural materials.

Hammatt and Shideler's (2012a) archaeological inventory survey approximately 0.5 mile to northeast also did not identify any significant archaeological historic properties or component features. Inglis et al.'s (2014) archaeological monitoring plan did not include fieldwork.

Table 1. Summary of Previous Archaeological Studies in and near Project Area

Previous Study	Formal Type	Results & Comments[1]
Haun 1991*	Archaeological inventory survey of 1,310-acre Naval Air Station, Barbers Point	42 new sites: SIHP #s 1717–1757; majority were traditional (Hawaiian) habitation & agricultural complexes; 6 had evidence of historic-period ranching use; also included utilized and potentially utilized pit cave ("sinkhole") features
Burgett & Rosendahl 1992	Archaeological inventory survey – Naval Air Station, Barbers Point (Contaminated soil stockpile/remediation facility)	20 new sites: SIHP #s 4548–4567; included traditional (native Hawaiian) agricultural and temporary habitation complexes containing mounds, modified sinkholes, a wall, terrace, modified outcrop, cairn, enclosure, pavement, platforms, an alignment, and cave
Erkelens 1992	Archaeological mapping of a single site – Naval Air Station, Barbers Point	Mapped SIHP # 1719, previously described by Haun (1991); new features included large high walled enclosure, small enclosures, C-shapes and mounds
Jones 1993	Cultural resource survey - Naval Air Station, Barbers Point, consisting of 3 discontinuous project areas, total 55 acres)	5 previously-recorded sites (Haun 1991) were studied including SIHP #s 1718 (habitation complex), 1719 (habitation complex), 1720 (habitation/agricultural complex), 1723 (habitation complex), & 1726 (platform, wall, mound cluster)
Landrum & Schilz 1993	Archaeological reconnaissance survey of TMK (1) 9-1-013:063 – west of the current project area	9 military buildings (#s 446-454) and 6 archaeological sites: SIHP #s 1728, 4649 & 4653 (sisal plantation walls), SIHP # 4650 (habitation complex), SIHP # 4651 (terrace & mound) & SIHP # 4652 (3 mounds); excavations recovered midden, traditional artifacts & radiocarbon dates from SIHP # 4650 (range AD 1665 to modern times)
Kaneshiro & Schilz 1994	Cultural resource management plan for the Navy base	Review of (then known) previously-identified historic properties in the area
Tuggle & Murakami 1995	Archaeological inventory survey of construction projects at Naval Air Station, Barbers Point	Several areas were investigated in advance of specific construction projects
Tuggle & Tomonari-Tuggle 1997	Cultural resource inventory for entire Naval Air Station, Barbers Point	Re-evaluated sites previously recorded by Haun (1991); also described 35 new sites: SIHP #s 5093–5130 & 5307; included pre-Contact habitation, historic-period habitation, ranching and trail remnants; WW II buildings and sites; "cold war" era structures; paleo-environmental samples collected from pit caves and wetland features
Beardsley 2001	Subsurface excavation of 63 sites as recommended in mitigation plan by IARII	254 test units "confirmed prehistoric Hawaiian occupation ad use within the area of Naval Air Station Barbers Point."
O'Hare & Hammatt 2003	Archaeological assessment (AIS no findings) of Bathhouse at Kalaeloa Campsite, Nimitz Beach	No significant findings

Previous Study	Formal Type	Results & Comments[1]
Cleghorn & Kahahane 2009	Archaeological assessment (AIS no findings) of parcel bounded by Hancock, Shangrila and Bunker Hill streets	No significant findings
Thurman et al. 2011	Archaeological inventory survey of Proposed U.S. Coast Guard Hanger location	2 sites recorded: SIHP # 5121 (small concentration of rubble-filled sinkholes) and SIHP # 5125 (complex of WWII pillboxes); also noted a subsurface cultural layer (likely part of SIHP # 2220) eroding from Nimitz Beach
Gosser et al. 2011	Archaeological inventory survey – Kalaeloa (TMK [1] 9-1-013:028, portion)	5 previously recorded sites (SIHP #s 1717–1719, 1721 & 1722 investigated; 12 new sites documented: SIHP #s 7176 (military wall, enclosure & terrace), 7177 (military foundations & vault), 7178 (military feature), 7179 (military platform), 7180 (portable concrete machine gun pillbox), 7181 (military refuse dump), 7182 (sinkhole complex), 7184 (sinkhole), 7185 (sinkhole complex), 7186 (sinkhole), 7187 (road and mounds) & 7188 (military/industrial site); 325 traditional and historic artifacts and abundant faunal materials were collected; SIHP #s 1717–1719, 1721, 1722, 1785 & 1786 radiocarbon dated to AD 1650 to 1870
Hammatt & Shideler 2012a	Archaeological inventory survey of parcels TMK (1) 9-1-013:032 (por.), 045 & 046	No significant findings
Hammatt & Shideler 2012b	Archaeological field inspection and literature review	No significant findings
Gosser et al. 2013	Archaeological monitoring - Kalaeloa (TMK [1] 9-1-013:028, portion	Monitored 6 previously-recorded sites (Haun & 1991, Jones 1993, Gosser et al. 2011): SIHP #s 1721 (habitation complex), 1727 (cave & sinkhole), 7176 (military complex), 7177 (military complex), 7180 (concrete pillbox) & 7181 (historic artifact scatter)
Vernon & Desilets 2013	Archaeological assessment (AIS no findings) of parcel TMK (1) 9-1-013:063	No significant findings
Inglis et al. 2014	Archaeological monitoring plan for the Kalaeloa Airport Hangar 110 Underground Facility Project	Review of (then known) previously-identified historic properties in the area
Medrano et al. 2014	Archaeological inventory survey of parcel TMK (1) 9-1-013:070	23 previously recorded sites investigated: SIHP #s 5119 & 5120 (agriculture/habitation complexes) and SIHP #s 7483 to 7504 (agricultural sites, habitation complexes, rock mounds, enclosures, karst pits, platforms and trails); 146 features documented
NAVFAC 2015	Identification of Historic Properties and Eligibility Determinations for Previously Identified Resources on Parcels 1-16 at Kalaeloa (Formerly Naval Air Station Barbers Point)	Final NRHP-eligibility assessments – including Building # 152 (Quonset Huts) in the current project area

Previous Study	Formal Type	Results & Comments[1]
Rivera & Monahan 2016	Hangar 110 at Kalaeloa Airport – archaeological monitoring report	No significant findings
Thurman et al. 2017	Archaeological inventory survey for Proposed New Naval Facility – U.S. Coast Guard	2 historic properties identified: a stacked coral mound (designated temporary site Honua 1) and multiple filled pit caves ("sinkholes") (designated site Honua 2)
Monahan et al. 2021a	Archaeological field inspection and literature review of parcel TMK (1) 9-1-013:128	Several above-ground structures, including buildings, all of which were constructed during or after WW II times, were identified; no traditional Hawaiian sites observed
Monahan et al. 2021b	Archaeological inventory survey of parcel TMK (1) 9-1-013:081	In addition to 2 previously known, WW-II era buildings, 1 pit cave ("sinkhole") was identified that contained human skeletal remains (designated temporary site Honua 1)

[1] SIHP = State Inventory of Historic Places; formal (complete) SIHP numbers in this table are preceded by "50-80-12-."
* Haun (1991) included contribution by Marion Kelly

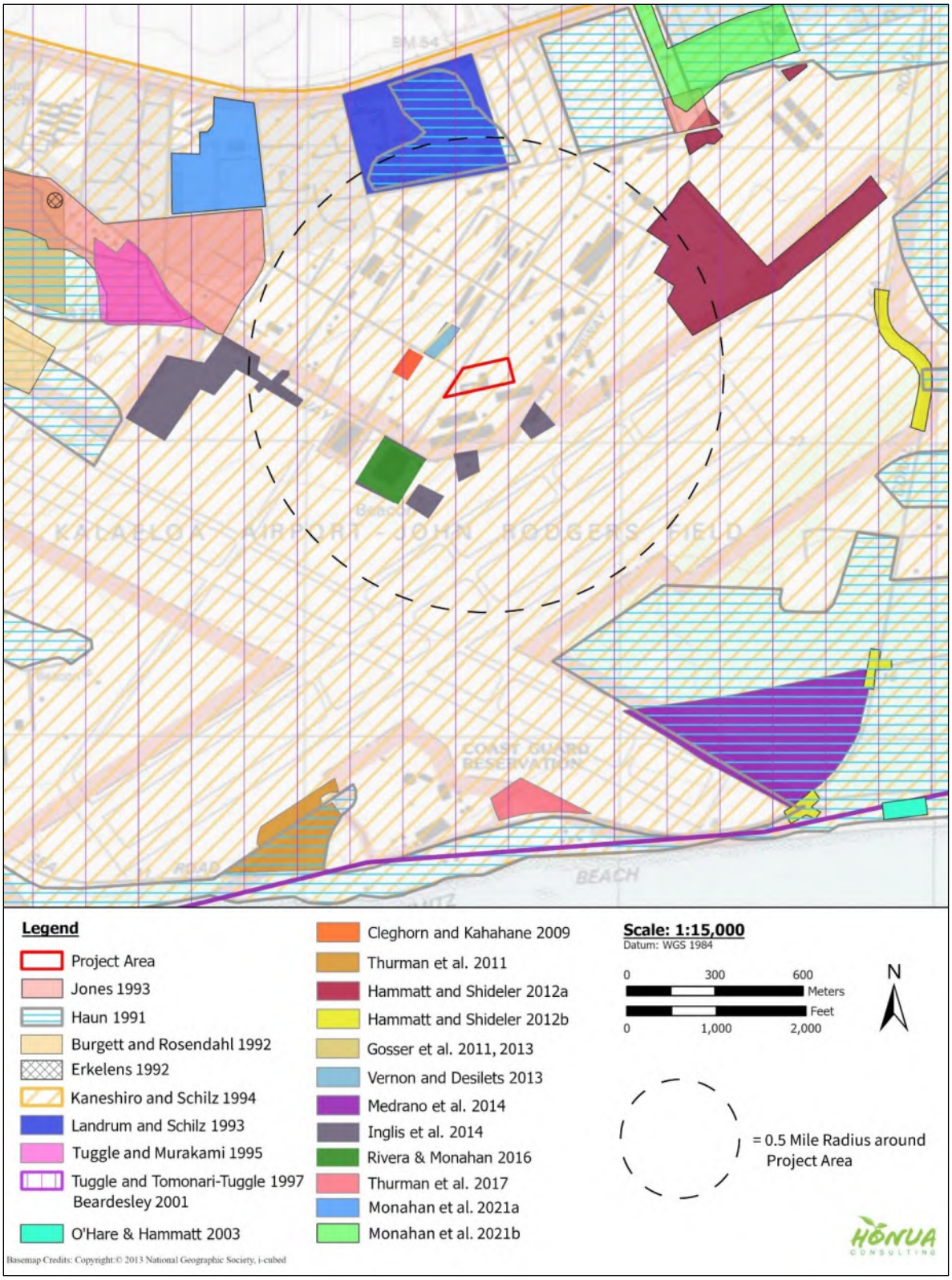

Figure 19. Previous archaeological studies in and within approximately one mile of the project area; dashed-line circle denotes smaller (0.5-mile) radius around project area (see table and text above for details)

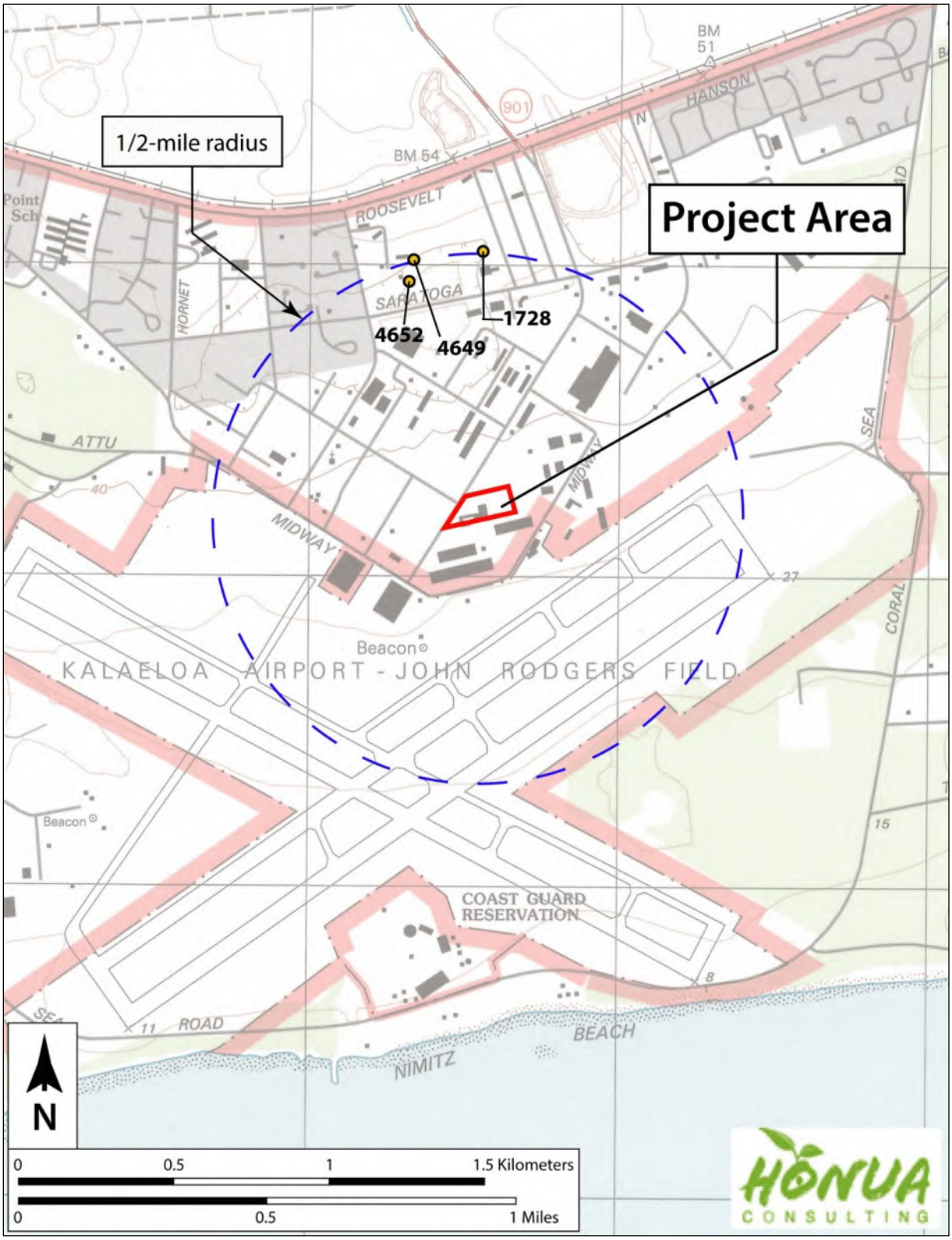

Figure 20. Previously-identified archaeological sites within approximately one-half mile of the project area (see table and text above for details)

Section 4 Results of Field Inspection

Fieldwork for this project was conducted on March 17, by Fred LaChance, B.A., and Cassandra Pascua, B.A., under the supervision of Christopher M. Monahan, Ph.D. (principal investigator). Fieldwork required approximately one (1) person day to complete. Fieldwork for this project was performed under the archaeological permit number 23-23 issued to Honua Consulting by the SHPD/DLNR in accordance with HAR Chapter 13-282.

4.1 Methodology

The archaeological field inspection consisted of a 100% pedestrian survey of exterior portions of the project area that were not covered by buildings, structures or other facilities.

Figure 21 depicts the survey transects walked by Honua archaeologists; survey transects were recorded using a hand-held Trimble GeoXT device that maintained an accuracy ranging between 1 to 3 meters (3–10 feet). In addition, field notes were recorded, photographs were taken, and a detailed photo log (captions) was created.

Figure 22 is a key to the location of photographs of the project area. All photographs are included in the Appendix. All data are stored and backed-up in Honua's database.

No subsurface testing (excavation) was conducted during this study.

4.2 Survey Results

As discussed above, one World War [WW] II-era architectural historic property (multiple Quonset Huts designated Building # 152) is located in the project area; its description and evaluation is being undertaken by a qualified architectural historian.

No other above-ground historic properties were identified. The ground surface in the project area has been completely altered (bulldozed and graded) multiple times over the years from at least as early as the WW-II era, and (at least in some portions) into modern times. Historical maps and aerial images indicate the earliest military alteration of the project area occurred sometime after 1927 (see Figure 11 and Figure 12) and before 1943 (see Figure 14).

No traditional Hawaiian sites, features or materials are located at the ground surface.

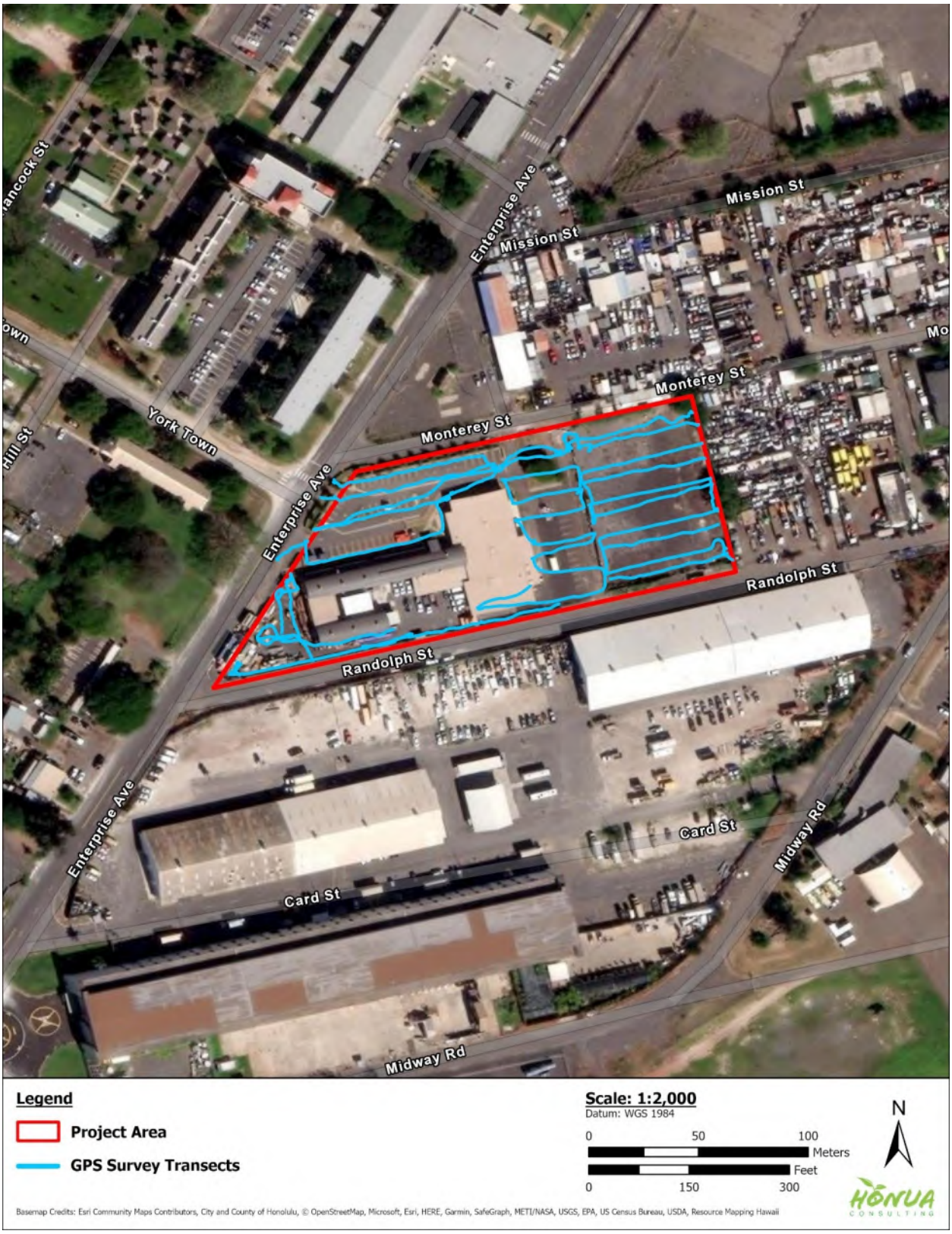

Figure 21. Aerial image showing pedestrian survey tracks completed by Honua archaeologists (see text above for details)

Figure 22. Key to the location of photographs of the project area (see Appendix for numbered photographs)

Section 5 Conclusion

This Archaeological Literature Review and Field Inspection (ALRFI) report was completed on behalf of Kalaeloa Ventures, LLC. The privately-owned (Hunt Communities Hawaii, LLC) project area, which consists of 3.81 acres, is in Kalaeloa, Honouliuli Ahupua‘a, ‘Ewa District, Island of O‘ahu. The subject parcel (TMK [1] 9-1-013:097) is within the boundaries of the former Naval Air Station, Barbers Point (NAS-BP) military (WW II-era) facility, just south (makai [seaward]) of the Kumuhonua Transitional Living Center and the Hawaii Army National Guard facilities; the surrounding area is generally characterized by light-industrial and other commercial operations. The Kalaeloa Airport (also known as John Rodgers Field), operated by the State of Hawai‘i (and once also part of the former NAS-BP), is directly to the south.

The objectives of this study included: (1) documentation and description of the parcel’s land-use history in the context of both its traditional Hawaiian character as well as its historic-period changes; (2) identification of any potential above-ground historic properties or component features; and (3) providing information relevant to the likelihood of encountering historically-significant cultural deposits in subsurface context during construction.

This ALRFI is not an archaeological inventory survey (AIS) and did not include subsurface testing (excavation). The document may be used, however, to consult with the State Historic Preservation Division (SHPD) in compliance with Hawai‘i Revised Statutes (HRS) Chapter 6E-42 and Hawai‘i Administrative Rules (HAR) § 13-13-284. Archival research and analysis includes discussion of historic maps and surveys dating from as early as 1825, aerial images from as early as 1927, previous archaeological studies and findings, and other ephemera.

Field inspection included a 100% pedestrian survey of exterior portions of the project area that were not covered by buildings, structures or other facilities.

The field inspection resulted in the following conclusions:

1. One World War [WW] II-era architectural historic property (multiple Quonset Huts designated Building # 152) is located in the project area; its description, alteration history, and evaluation is being undertaken by a qualified architectural historian.
2. No other above-ground historic properties were identified. The ground surface in the project area has been completely altered (bulldozed and graded) multiple times over the years from at least as early as the WW-II era, and (at least in some portions) into modern times. Historical maps and aerial images indicate the earliest military alteration of the project area occurred sometime after 1927 and before 1943.
3. No traditional Hawaiian sites, features or materials are located at the ground surface.

5.1 Recommendation

A program of archaeological monitoring in accordance with HAR § 13-13-279 should be implemented in support of subsurface ground disturbance in the project area. This mitigation will ensure appropriate treatment of any subsurface features, artifacts, midden or other cultural items, should such material be identified. In addition, this mitigation will ensure appropriate treatment of human skeletal remains, burials, or burial items, should such material be present. As per HAR § 13-13-279, an archaeological monitoring program will

include an archaeological monitoring plan (AMP) that will contain design details of the areal and vertical extent of construction ground disturbance, as well as what types of construction activities are proposed for the project area. Specific details should be formalized in the AMP, in consultation with the SHPD-Archaeology Branch.

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Appendix – Site Photographs

This appendix contains 41 photographs of the project area taken by Honua Consulting during the current study.

Photo 1 – Gated entrance to asphalt parking lot in eastern half of the parcel along Monterey Street (to the left); view northeast

Photo 2 – Gated entrance along west side of parcel on Enterprise Avenue, facing out to the avenue; view west

Photo 3 – Another view of gated entrance along west side of parcel on Enterprise Avenue (left); facing north

Photo 4 - Another view of gated entrance along west side of parcel on Enterprise Avenue (right); facing southwest

Photo 5 – Building entrance in southern portion of parcel; view north

Photo 6 – Another view of building entrance in southern portion of parcel; facing northwest

Photo 7 - Another view of building entrance in southern portion of parcel; facing northeast

Photo 8 – View of asphalt parking lot, southeast corner of parcel; view north-northwest

Photo 9 – Another view of asphalt parking lot, southeast corner of parcel; view west-northwest

Photo 10 - Another view of asphalt parking lot, southeast corner of parcel; view west

Photo 11 – View of eastern third of the parcel from its southern side; facing north

Photo 12 - View of eastern-central portion of the parcel from its southern side; facing northwest

Photo 13 – Another view of eastern-central portion of the parcel from its southern side; facing west

Photo 14 – Overview of northeast corner of parcel; view southwest

Photo 15 – Another view of northeast corner of parcel; view southwest

Photo 16 - Another view of northeast corner of parcel; view south

Photo 17 – View of southwest corner of asphalt parking lot in eastern portion of parcel; view northeast

Photo 18 – Another view of southwest corner of asphalt parking lot in eastern portion of parcel; view north

Photo 19 - Another view of southwest corner of asphalt parking lot in eastern portion of parcel; view north-northwest

Photo 20 – View of main entrance along Enterprise Avenue; facing east-northeast

Photo 21 – Another view of main entrance along Enterprise Avenue; facing northeast

Photo 22 – View from southwest corner of parcel; facing northeast

Photo 23 – Another view from southwest corner of parcel; facing northeast

Photo 24 – View of entrance along Enterprise Avenue; facing southeast

Photo 25 – Another view of entrance along Enterprise Avenue; facing south

Photo 26 – Another view of entrance along Enterprise Avenue; facing east

Photo 27 – Another view of entrance along Enterprise Avenue; facing southeast

Photo 28 – Another view of entrance along Enterprise Avenue; facing southeast

Photo 29 - Another view of entrance along Enterprise Avenue; facing east

Photo 30 – View of northwest corner of parcel; facing south

Photo 31 – Another view of northwest corner of parcel; facing southeast

Photo 32 - Another view of northwest corner of parcel; facing east

Photo 33 – Previous location of removed tank; view west-southwest

Photo 34 – Another view of previous location of removed tank; view west-southwest

Photo 35 – Another view of previous location of removed tank; view southwest

Photo 36 – View of project area; facing northeast

Photo 37 – Another view of project area; facing north-northeast

Photo 38 – Another view of project area; facing north

Photo 39 – Southwest corner of parcel; view northwest

Photo 40 – Another view of southwest corner of parcel; view north

Photo 41. View of southern side of parcel; view west