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**Archaeological Inventory Survey for the  
Airport Section (Construction Section 3) of the  
Honolulu High-Capacity Transit Corridor Project,  
Hālawā and Moanalua Ahupua‘a, ‘Ewa and Honolulu Districts,  
O‘ahu Island  
TMK Sections [1] 1-1 and 9-9 (Various Plats and Parcels)  
Appendices:**

**Appendix A: Place Names, *Wahi Pana*, and a Synthesis of Data from  
Ethnographic/Ethnohistoric Studies**

**Appendix B: Land Commission Awards**

**Appendix C: Research Design**

**Appendix D: Sample Consultation Letters and Consultation Responses**

**Appendix E: GPR Method Investigation**

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**Prepared for  
The City and County of Honolulu and  
The Federal Transit Administration  
On Behalf of  
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## Section 1 Introduction

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### 1.1 Project Background

Cultural Surveys Hawai‘i, Inc. (CSH) completed this archaeological inventory survey (AIS) for Construction Section 3 (Airport) of the Honolulu High-Capacity Transit Corridor Project (HHCTCP) for the Honolulu Authority for Rapid Transit (HART) of the City & County of Honolulu (City), for the Federal Transit Administration (FTA), and on behalf of PB Americas, Inc. (PB). The AIS Airport study area is from Kalaloa Drive (just northwest of Hālawā Stream) in the west to Middle Street (just west of Kalihi Stream) in the east, located within the traditional Hawaiian land divisions of Hālawā (‘Ewa District) and Moanalua Ahupua‘a (Honolulu District), Island of O‘ahu, TMK: [1] 1-1 and 1-9 (Various Plats and Parcels) (Figure 1).

The entire proposed HHCTCP extends approximately 37 km (23 miles) from Kapolei in the west to the Ala Moana Center in the east. The focus of this AIS is the majority of the Airport Section 3 construction section, which extends from Station 994+00 Kamehameha Highway at Kalaloa Drive (just northwest of Hālawā Stream) to Station 1248+00 (Kamehameha Highway at Middle Street, just west of Kalihi Stream), for a distance of 7.74 kilometers (25,400 feet or 4.8 miles) and includes three stations: the Pearl Harbor Naval Base Station, the Honolulu International Airport Station, and the Lagoon Drive Station and a “System Site” transit facility 250 m east of the Lagoon Drive Station.

The portion of the HHCTCP route addressed in this archaeological inventory survey investigation has a western end on Kamehameha Highway at Kalaloa Drive, 100 m northwest of Hālawā Stream (where it meets the southeast end of the Phase 2 AIS study area). The route continues south on Kamehameha Highway. Just south of Radford Drive is the Pearl Harbor Naval Base Station platform extending over Kamehameha Highway, with an associated transit station on the ground level on the southeast corner of Radford Drive and Kamehameha Highway. From the Pearl Harbor Naval Base Station, the route continues south on Kamehameha Highway, passing over the Center Drive intersection, where it continues south following the alignment of the H-1 Freeway Viaduct Makai Frontage Road (on the *makai* side of the H-1 Freeway Viaduct), crossing to the *makai* (seaward) side of Nimitz Highway by Valkenburgh Street. The route continues southeast on the *makai* side of Nimitz and the H-1 Freeway Viaduct, passing Main Street and Elliott Street. At Aolele Street the route turns south (*makai*), continuing along the east side of the *mauka/makai* (inland/seaward) trending Aolele Street, curving east at Ala Onaona Street, to the Honolulu International Airport Station. The two alternate Honolulu International Airport Station locations are located (in a presently at-grade parking area) just northwest of the main Honolulu Airport overseas parking structure. From that station, the route continues east following the alignment of Ala Onaona Street, crossing Pai‘ea Street. Past Aowena Place, the route angles *mauka* to cross from Aolele Street to Ualena Street. The route then follows Ualena Street, crossing Lagoon Drive. The Lagoon Drive Station is immediately east of Lagoon Drive on the south portion of Waiwai Loop (*mauka* and *makai* entrance buildings are on either side of this portion of Waiwai Loop). From that station, the route continues east on the south side of the south portion of Waiwai Loop, crossing over an area of warehouses to Ke‘ehi Lagoon Beach Park. The route angles northeast through Ke‘ehi Lagoon Beach Park, *makai* of the tennis courts,

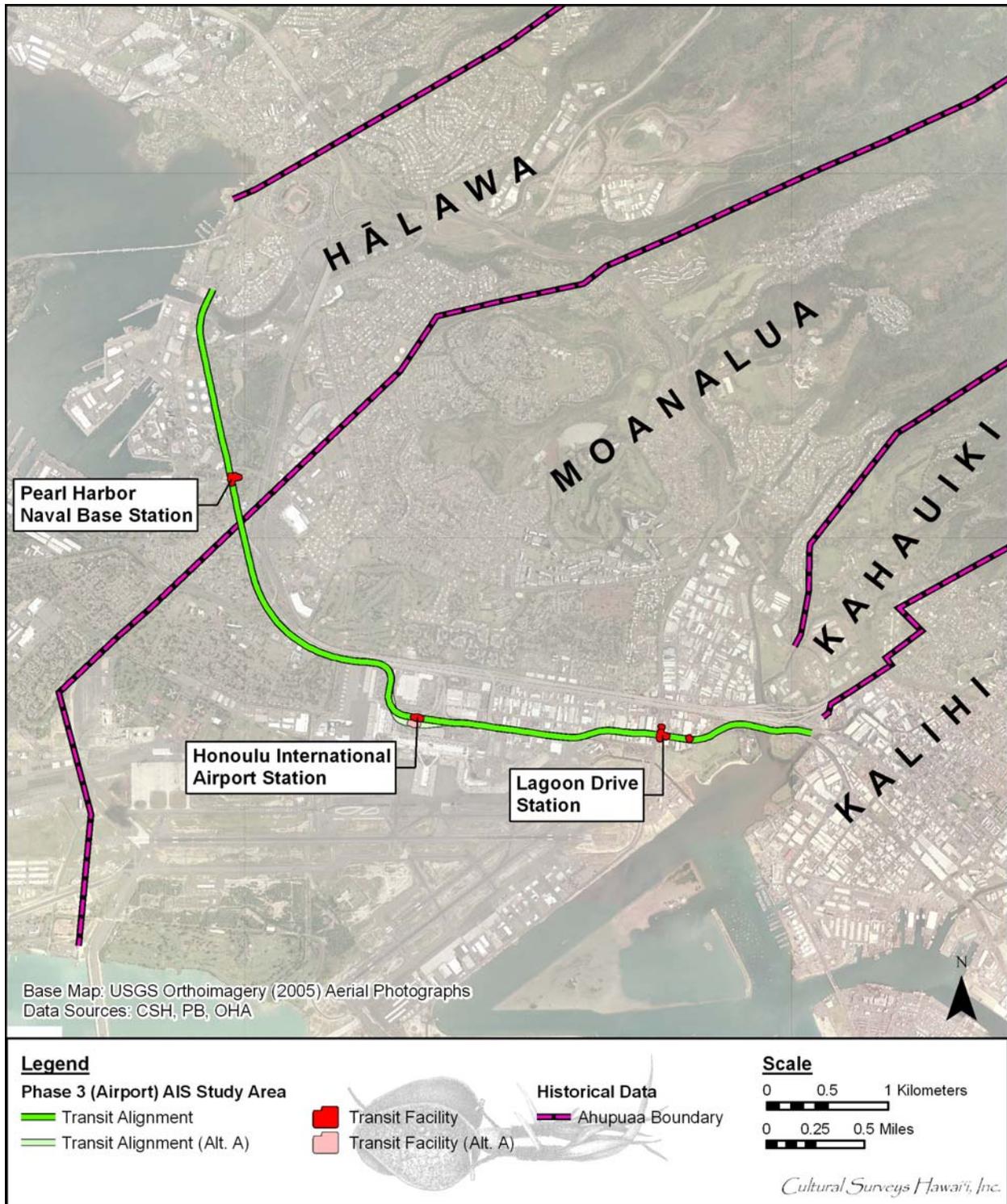


Figure 1. U.S. Geological Survey Orthophotoquad showing the Airport Section in relation to the *ahupua'a*

and crosses Moanalua Stream *makai* and parallel to Nimitz Highway. In the short stretch between Moanalua Stream and Kalihi Stream, the route crosses *mauka* of Nimitz Highway, joining Kamehameha Highway at the Middle Street intersection (where it meets the Section 4 AIS study area).

This Airport AIS study area includes the majority of HHCTCP's Construction Section 3, but it is truncated slightly at both ends (the AIS study addressing the west end has been accepted by the SHPD and the AIS study of the east end is on-going). The Airport AIS study area is depicted on a U.S. Geological Survey 7.5-Minute Series Topographic Map, Honolulu (1998) Quadrangle (refer to Introduction of main AIS report).

The AIS Section 3 Airport study area is primarily located within existing road rights-of-way owned by the State of Hawai'i or the City & County of Honolulu, including Kamehameha Highway, North Nimitz Highway, Aolele Street, and Ualena Street to the vicinity of Lagoon Drive, then back to Nimitz Highway, then turning to Kamehameha Highway just west of Kalihi Stream. Support facilities along the project corridor are located on adjacent privately owned lands.

The HHCTCP's purpose is to provide high-capacity rapid transit in the highly congested east-west transportation corridor between Kapolei and the Ala Moana Center via a fixed guideway rail transit system. The FTA and the City will fund project construction. In addition to the guideway, the project will require construction of transit stations and ancillary support facilities. Three proposed transit stations are within the current AIS study area, including: Pearl Harbor Naval Base Station, Honolulu International Airport Station, and the Lagoon Drive Station (see Figure 1). Project construction will also require relocation of existing utility lines within the project corridor that conflict with the proposed project design. Minimally, land-disturbing activities would include grading of facility locations and excavations for guideway column foundations, subsurface utility relocation and installation, and station and ancillary facility foundation construction.

The HHCTCP area of potential effect (APE) for archaeological cultural resources is defined in the HHCTCP final Programmatic Agreement (Stipulation II.A.1.) as all areas of direct ground disturbance. For the present Airport AISP survey area (most of Construction Section 3), HHCTCP project engineers estimate that the project's area of direct ground disturbance is approximately 604,289 square feet (or 13.87 acres). These 13.87 acres are the survey area for this Phase 3 Airport AISP investigation.

## 1.2 Introduction to Appendices

This volume includes six appendices studies as follows:

### **Appendix A: Place Names, Wahi Pana, and a Synthesis of Data from Ethnographic/Ethnohistoric Studies**

As per the archaeological inventory survey plan for the Airport (Section 3) Construction (Hammatt and Shideler 2011) this discussion augments the cultural history (report Sections 2 and 3) overview presented in the main body of the report by drawing upon and integrating the research of four additional studies that include reviews of place names, *wahi pana* (storied places), and traditional cultural properties.

**Appendix B: Land Commission Awards**

In order to present a complete study a compendium of Land Commission Awards data is presented. This is drawn directly from the Hammatt and Shideler 2011 AISP Appendix A

**Appendix C: Research Design**

In order to present a complete AIS study, the research design is presented. This is drawn from Sections 7 and 9 of the Hammatt and Shideler 2011 AISP. While this is largely verbatim from the AISP, it does include an update on where test excavations were actually excavated in comparison to where they were initially proposed (according to the Hammatt and Shideler 2011 AISP).

**Appendix D: Sample Consultation Letters and Consultation Responses**

In order to present a summary of initial consultation related to the AISP preparation Appendix D includes consultation letters and response letters. This is drawn directly from Section 8 of the Hammatt and Shideler 2011 AISP.

**Appendix E: GPR Method Investigation**

In accordance with the Hammatt and Shideler 2011 AISP Section 7.4, a major component of the present study was to be a methods investigation of the efficacy of Ground Penetrating Radar (GPR) technology for the identification of human burial remains and other types of subsurface archaeological features. While a summary of those results are integrated in the main body of this AIS report on an excavation by excavation basis, the results are presented in detail in Appendix E.

**Appendix F. Pollen Results**

This is a verbatim report from Linda Scott Cummings of the PaleoResearch Institute that was the basis for the discussion of pollen results presented in Section 8.3 of the main body of this AIS report.

# Appendix A Place Names, *Wahi Pana*, and TCPs

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## Introduction to a Further Review of Place Names, *Wahi Pana*, and TCPs

The *Archaeological Inventory Survey Plan for the Airport (Phase 3) Construction ...* (Hammatt and Shideler 2011: 15, 117) asserts that: “cultural background section will be augmented in the subsequent AIS report through the incorporation of the results of Kumu Pono Associates and SRI Foundation’s ongoing TCP/ethnographic/ethnohistoric studies for the Airport vicinity.” Two related studies were supplied to CSH to further inform the archaeological inventory survey: *He Mo‘olelo ‘Āina – Traditions and Storied places in the Districts of ‘Ewa and Moanalua (in the District of Kona). Island of O‘ahu: A Traditional Cultural Properties Study – Technical Report* (Maly and Maly 2012) and a *(Draft Report) Study to Identify the Presence of Previously Unidentified Traditional Cultural Properties in Sections 1-3 for the Honolulu Rail Transit Project Management Summary* (The SRI Foundation and Kumu Pono Associates LLC. 2012). These two studies are addressed here in an effort to integrate the findings with the archaeological work. Both studies address fourteen traditional Hawaiian land divisions or *ahupua‘a* including 13 of the traditional ‘Ewa District *ahupua‘a* and Moanalua Ahupua‘a of Kona District. The present archaeological study concerns Hālawā Ahupua‘a of ‘Ewa District and Moanalua Ahupua‘a of the traditional Kona District almost exclusively as these are the lands traversed by the Airport segment of the HHCTCP project.

In order to more fully address the relationship of this archaeological study to prior documentation of cultural traditions consideration is also given here to two additional studies: *A Study of Native Hawaiian Traditional Cultural Places Hickam Air Force Base, Hālawā and Moanalua Ahupua‘a, ‘Ewa and Kona Districts, O‘ahu, Hawai‘i* (Allen 2005), the *Cultural Resources Technical Report Honolulu High-Capacity Transit Corridor Project* (2008).

## Maly and Maly (2012) and SRI Foundation and Kumu Pono Associates LLC. (2012) studies

The Maly and Maly (2012) study is in the nature of a detailed compendium of Hawaiian Traditions, historic accounts, land tenure and survey data, Boundary Commission surveys and proceedings, and oral history interviews including two detailed interviews (from 1997 and 2003) with *kūpuna* and *kama‘āina* who had passed away before the present project.

The SRI Foundation and Kumu Pono Associates LLC. (2012) study draws extensively from the Maly and Maly (2012) study presenting preliminary findings on a Traditional Cultural Properties (TCP) study.

The following discussion of place names and *wahi pana* (“storied places”) draws upon the aforementioned studies as they pertain to the specific transit corridor. The reader is referred to these studies for greater detail.

## Place Names

Place Names (*Inoa 'Āina*) offer insights into traditional patterns of land use. As a sweeping, crude, generalization (there are certainly exceptions) there is a relationship between the frequency of place names and the intensity of land use and the richness of the cultural landscape. More intensively utilized landscapes typically have more place names than less-utilized landscapes. A summary of the place names reported for Hālawā Ahupua'a (Table 1) and Moanalua Ahupua'a (Table 2) by Maly and Maly (2012:5-45) and The SRI Foundation and Kumu Pono Associates LLC. (2012: B-1 to B-28) studies is given below. This listing was by no means meant to be exhaustive by the compilers but was intended to be a listing “for which traditions were recorded, or which were frequently referenced in historical accounts reviewed...” Maly and Maly (2012:4) and as pertinent for the transit study. Following the SRI Foundation and Kumu Pono Associates LLC. (2012: B-1) approach the place names “identified as in or near the project area” are presented in shaded rows in Table 1 and Table 2 below. Note these place names may or may not constitute Traditional Cultural Properties, as described in National Register Bulletin 38. Nonetheless they provide cultural context for the results of the AIS.

The supplied listing includes (not including the *ahupua'a* names themselves) five names for Hālawā (Kalo'iiki, Kalokoloa, Kapukakohekohe, Konohikilehulehu, Piomoewai) and twenty place names for Moanalua (Āhua, Au'au, 'Auwaiomiki, Awaawaloa, Ka'ihikapu, Kai-iki, Kaloalua, Ka'oki, Kauki (Keuki), Koko, Kukukahi, Kumuma'u, Lelepaua, Māpunapuna, Mokumoa, Mokuo'eō, Moku'onini, Pahunui, Pālani, and Weli). The place names are notably clumped. This is suggested to parallel, be directly related to, and support, the evidence of the distribution of Land Commission Awards and the indicated distribution of *wahi pana* in indicating that this HHCTCP Airport (Phase 3) transit corridor was a relatively less utilized portion of these *ahupua'a* than lands seaward (*makai*) and inland (*mauka*) and at the ends of the present corridor of study.

The unique geography of the HHCTCP Airport (Segment 3) transit corridor places this study area in a rain shadow (in the lee of the Makalapa, Āliamanu and Āliapa'akai post-erosional volcanic landforms) of a rain shadow (in the lee of the Ko'olau Mountain Range). The same post-erosional volcanic landforms not only decrease the rainfall they also serve to divert surface runoff as Hālawā Stream is effectively pushed far to the west and Moanalua Stream is pushed far to the east.

Thus it is no surprise that the recorded *Inoa 'Āina* are decidedly clumped around the two sources of surface water at the ends of this project segment.

### Hālawā Place Names

The five listed place names of particular import for Hālawā in or near the project corridor (The SRI Foundation and Kumu Pono Associates LLC. 2012: B-1 to B-28; see shaded rows in the following Table 1) fall in two clumps.

Three of the place names (Kalo'iiki, Konohikilehulehu, and Piomoewai, see Maly and Maly 2012: 391) are all located close together near a slight northern bend of the stream. Kalo'iiki is the general name of a land section (*'ili*) on the south side of the bend (see Figure 2). Konohikilehulehu is the name of a *mo'o 'āina* agricultural parcel claimed by Opunui (LCA 2156: parcel 1) within this small land division on the south side of the bend. The home (*pāhale*) of

Opunui (LCA 2156: parcel 3) on the northwest side of the bend was in a field or pasture or small plain (*kula*) called Piomoewai. The closest of these three place names appears to be 700 m ESE of the northern end of the Airport segment. That general area approximately 700 to 1200 m upstream was clearly something of a quilt of homes and agricultural fields.

The other two specified Hālawa place names of particular import (Kalokoloa, and Kapukakohekohe) are immediately east of the NW end of the Airport Section. Kalokoloa was a fishpond and Kapukakohekohe (Kakohekohe) was a land area just to the northeast.

The main point in this discussion of the *Inoa 'Āina* Place Names of Hālawa Ahupua'a is that there are a great many associated with the seaward portion of Hālawa Stream where there was fresh water, where people lived and grew *kalo* in *lo'i* and raised fish in *loko pu'uone* fish ponds. None of these indicated place names is more than 250 m from the stream. There appear to be no other *Inoa 'Āina* place names indicated along the Airport segment in Hālawa Ahupua'a.

Table 1. Place Names Near Hālawā Ahupua‘a (adapted from The SRI Foundation and Kumu Pono Associates LLC. 2012: B-1 to B-28: place names identified as in or near the Airport Section project area are shaded and an \* identifies indicated *wahi pana*)

<i>Inoa ‘Āina</i>	<i>Ahupua‘a and Description</i>	<i>Source</i>
Hālawā	<i>Ahupua‘a</i> . “The broad flatlands extending 1.5 miles below the highway along Hālawā Stream are now under cane but were formerly terraces. The terraces also extended up the flats along the lower courses of Kamananui and Kamanaiki Streams which join to form Hālawā, and I am told that there were small terraces farther up both streams. Four and 5 miles inland, dry taro was planted on the banks of gulches.” (Handy, 1940:80)	Maly and Maly 2012:8
Haluluhale	‘Aiea-Hālawā boundary zone. A ancient burial cave with openings in both <i>ahupua‘a</i> . (1869, Boundary Commission proceedings)	Maly and Maly 2012:9
Iholena	‘Aiea-Hālawā boundary zone. An area situated in the uplands, there were once houses and workshops of <i>olonā</i> and canoe makers here.	Maly and Maly 2012:11
Kahakupōhaku (Mole o Kahakupōhaku)	Hālawā-‘Aiea boundary zone. A fishpond and large stone (Mole o Kahakupōhaku) in the wall between Kahakupōhaku and Kailōpā‘ia fishponds; marking the boundary between these two <i>ahupua‘a</i> .	Maly and Maly 2012:12
Kahalekaha	‘Aiea-Hālawā boundary zone. An <i>ala pi‘i</i> (trail to uplands) rises on the bluff, between the two <i>ahupua‘a</i> at this place. (1869, Boundary Commission proceedings)	Maly and Maly 2012:12
Kailōpā‘ia	Hālawā. A fishpond boundary between Hālawā and ‘Aiea.	Maly and Maly 2012:14
Kaleinaaka‘uhane *	Moanalua-Hālawā boundary zone. This site situated on the inland side of Āliamanu, by Kapukakī and Leiolono is a leaping place for the spirits of the dead ( <i>leina a ka ‘uhane</i> ). Some passed this leaping place, went on to the care of their ‘ <i>aumakua</i> , others, who had no one to help them, drifted down to Kaupe‘a, Kama‘oma‘o, and Kānehili (the plains around Pu‘u o Kapolei), where they would wander aimlessly in hope that someone would direct them to the spirit world.	Maly and Maly 2012:16

<i>Inoa 'Āina</i>	<i>Ahupua'a</i> and Description	Source
Kalo'iiki	Hālawa. A named locality. Cited in project area claims of the Māhele.  A reconstruction of awarded <i>kuleana</i> supplied by Klieger shows the place name Kalo'iiki as an <i>'ili</i> name centered on the south bank of a northern bend of Hālawa Stream approximately 1 kilometer east of the north end of the HHCTCP Airport (Phase 3) transit corridor.	Maly and Maly 2012:16  Klieger 1995:61
Kalokoloa	Hālawa. An <i>'ili</i> . Cited in claims of the Māhele.  A reconstruction of awarded <i>kuleana</i> supplied by Klieger shows the place name Kalokoloa as a fish pond (Pu'uone Kalokoloa) located on the north side of the mouth of Hālawa Stream within a 100 m or so of the north end of the HHCTCP Airport (Phase 3) transit corridor.	Maly and Maly 2012:16  Klieger 1995:61
Kamau	Hālawa. An <i>'ili</i> . Cited in claims of the Māhele.	Maly and Maly 2012:18
Kapua'ikāula	Hālawa. A coastal site where the bodies of sharks were tossed during a battle between the sharks of Pu'uloa and Keli'ikauaoka'ū. Kapua'ikāula is a canoe landing and marks the narrowest point in the channel between Hālawa and Pu'uloa, for the entry to Ke awa lau o Pu'uloa (Pearl Harbor). Cited in traditions and historical accounts.	Maly and Maly 2012:21
Kapua'ikāula	Hālawa. A coastal site where the bodies of sharks were tossed during a battle between the sharks of Pu'uloa and Keli'ikauaoka'ū. Kapua'ikāula is a canoe landing and marks the narrowest point in the channel between Hālawa and Pu'uloa, for the entry to Ke awa lau o Pu'uloa (Pearl Harbor). Cited in traditions and historical accounts.	Maly and Maly 2012:21
Kapukakī * (Keka'anī'auokapukakī)	Moanalua-Hālawa. A <i>wahi pana</i> boundary marker between the Kona and 'Ewa Districts; situated on the upland side of Āliamanu near an ancient burial ground. (see also Kaleinaaka'uhane and Leiolono)	Maly and Maly 2012:21

<i>Inoa 'Āina</i>	<i>Ahupua'a and Description</i>	<i>Source</i>
Kapukakohekohe	'Aiea-Hālawā boundary zone. Kapukakohekohe is situated on the coastal flats. It was near here where Kalanimanu'ia (w.) died. (1869, Boundary Commission proceedings).  A reconstruction of awarded <i>kuleana</i> supplied by Klieger (1995:61) shows the place name Kalokoloa as 250 m east of the mouth of Hālawā Stream	Maly and Maly 2012:22  Klieger 1995:61
Kapūlehu	'Aiea-Hālawā boundary zone. An ancient house site in the uplands. (1869, Boundary Commission proceedings)	Maly and Maly 2012:22
Kapu'ukapu *	'Aiea-Hālawā boundary zone. A lowland hill situated a short distance above Kapukakohekohe. The name, "The <i>kapu</i> hill" implies some sort of religious/ceremonial significance. (1869, Boundary Commission proceedings)	Maly and Maly 2012:22
Keahuake'oa	'Aiea-Hālawā boundary zone. Referred to by elder native witnesses in the 1869 Boundary Commission proceedings as a "storied place": "... <i>hiki i kahi awawa i kapaia o Waipa mai laila a hiki i Keahuakeoa he wahi pana ia, he Ahua aa, holo mai a ke Awaawa o Kaawili mai laila a Nailiili a Malei...</i> " (...then reach the gulch called Waipa, and from there go to Keahuakeoa, a "wahi pana" (storied place), a stone mound, from there go to the gulch of Kaawili, and from there to Nailiili a Malei...).	Maly and Maly 2012:25
Keanapua'a	Hālawā. Site of a fishpond made by Kāne and Kanaloa. Also a famous cave on the coastal point, and resting place of the demigod, Kamapua'a. The cave was later used by fishermen as a shelter. Cited in the traditions of Kamapua'a and <i>Na Wahi Pana o Ewa</i> (1899).	Maly and Maly 2012:26
Komoawa (Kamoawa)	Hālawā. Named for a guardian shark who was the watchman or keeper of the gate into Ke Awalau o Pu'uloa. He lived in the cave called Ke'a'ali'i, and kept man-eating sharks out of the region. Also Identified as being the estuary channel leading into the eastern section of Ke awa lau o Pu'uloa. Now known as the "Hālawā Branch." Cited in <i>Saturday Press</i> , Dec. 29, 1883; and in <i>Na Wahi Pana o Ewa</i> (1899).	Maly and Maly 2012:28

<i>Inoa 'Āina</i>	<i>Ahupua'a</i> and Description	Source
Konohikilehulehu	Hālawā. A named locality. Cited in project area claims of the Māhele.	Maly and Maly 2012:28
Kumuma'u *	Moanalua-Hālawā boundary zone. Situated on the former shore line, just above the place called Pālani. Cited in the tradition of Puhī o Laumeki. A named locality cited in project area claims of the Māhele.	Maly and Maly 2012:29
Kūnānā (Loko Kūnānā)	Hālawā. A fishpond and detached parcel on the Hālawā coastal flats.	Maly and Maly 2012:30
Maka'alaea	'Aiea-Hālawā boundary zone. A large stone on the shore, marking the boundary between these two <i>ahupua'a</i> (at the land of William Poomoku). (1869, Boundary Commission proceedings)	Maly and Maly 2012:32
Makalapa	Hālawā. An ancient crater perched above the Hālawā coastal flats.	Maly and Maly 2012:32
Nā'ili'ili	'Aiea-Hālawā boundary zone. An upland gulch where <i>olonā</i> was grown and made, and <i>'awa</i> planted. (1869, Boundary Commission proceedings)	Maly and Maly 2012:35
Nāpēhā *	Hālawā. The western end of Leiolono, and place where spirits of the dead would be encouraged to pass through by their <i>'aumākuā</i> . The spring was named "Lean over" because King Kūali'i leaned over to drink water here ('Ī'ī, 1959). It is also reported that the spring was guarded by a <i>mo'o</i> (water spirit). Kamakau. <i>Nupepa Ke Au Okoa, Okatopa</i> 6, 1870.) A spring near the ancient trail between 'Ewa and Kona. Cited in <i>Na Wahi Pana o Ewa</i> (1899).	Maly and Maly 2012:35
Pāpua'a	'Aiea-Hālawā boundary zone. An ancient cultivating ground. (1869, Boundary Commission proceedings)	Maly and Maly 2012:38
Piomoewai	Hālawā. A named locality. Cited in project area claims of the Māhele.	Maly and Maly 2012:38
Pōhaku'ume'ume	Hālawā-'Aiea boundary zone. A legendary stone marking the boundary. (1874, Boundary Commission Proceedings)	Maly and Maly 2012:40

<b><i>Inoa 'Āina</i></b>	<b><i>Ahupua'a</i> and Description</b>	<b>Source</b>
Pu'ua	'Aiea-Hālawā boundary zone. An ancient canoe makers house and workshop ( <i>Kahuahale kālai wa'a</i> ).	Maly and Maly 2012:40
Wailolokai	Hālawā. A marshy area on the Hālawā coastal flats.	Maly and Maly 2012:44

\*indicates a *wahi pana* (see Figure 5 and Figure 6)

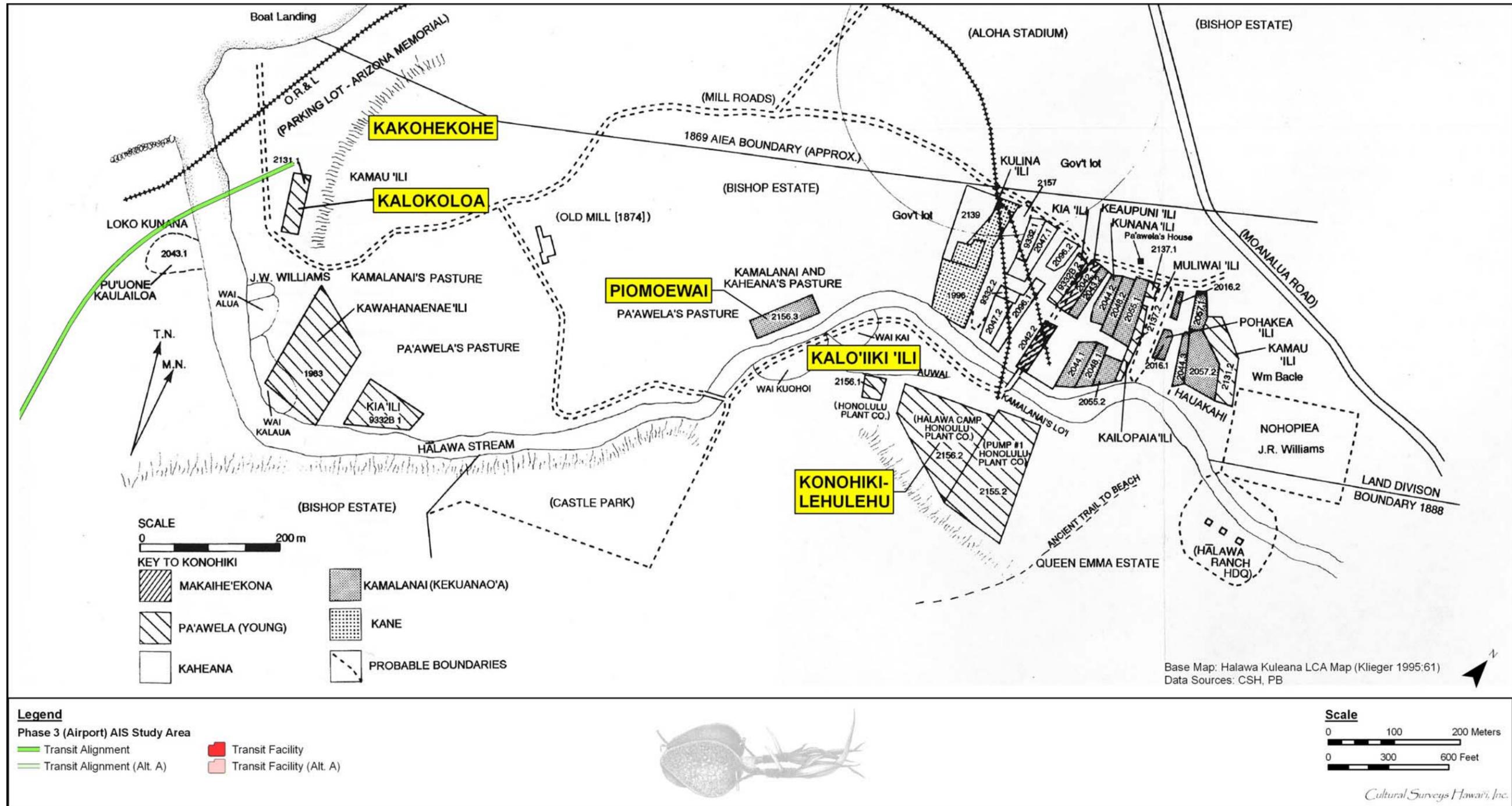


Figure 2. This figure (adapted from Klieger 1995:61) shows the relationship of the northwest end of the Airport Segment of the Transit corridor (at upper left) to the rich cultural landscape in the seaward portion of Hālawā Stream. Noted place names include: “Lalo‘iiki ‘Ili” (at the N. bend of Hālawā Stream a km E of the N. end of the Segment), “Kalokoloa” (just SW of the N. end of the Segment), “Kapukakohekohe (“Kakohekohe”)” (120 m NE of the N. end of the Segment), “Konohikilehulehu” (the vicinity of Opunui’s LCA 2156:1) shown here as “Honolulu Plant Co.” in Kalokoiki ‘Ili (a km E of the N. end of the Segment) and “Piomoewai” (the vicinity of Opunui’s *pāhale* or home LCA 2156:3) shown here as “just south of “Kamalanai and Kaheana’s Pasture” (700 m E of the N. end of the Segment)

## Moanalua Place Names

Most of the twenty cited *Inoa 'Āina* place names (in addition to “Moanalua”) indicated as in or near the project corridor in Moanalua Ahupua'a (see shaded rows in Table 2 for Āhua, 'Au'au, 'Auwaiomiki, Awaawaloa, Ka'ihikapu, Kai-iki, Kaloaloa, Ka'oki, Kauki (Keuki), Koko, Kukukahi, Kumuma'u, Lelepaua, Māpunapuna, Mokumoa, Moku'eō, Moku'onini, Pahunui, Pālani, and Weli) are shown on the 1890 Monsarrat and Lyons map of Moanalua and Kahauiki (Figure 3) and/or the 1920 Monsarrat Honolulu District Map (Figure 4). The relationship of each of these place names to the project corridor is described below.

**Āhua**, is understood as a low silty sandy spit formerly on the west entrance to Ke'ehi lagoon approximately 2.25 km south of the Honolulu International Airport Station (see Figure 3)

**'Au'au**, is not shown on any historic map to our knowledge. The posited location is shown on Figure 7.

**'Auwaiomiki**, in context this is understood as a point associated with the demarcation of the boundary of Moanalua Ahupua'a (Maly and Maly 2012:711) and of fishing rights (Maly and Maly 2012:513). The indicated location, called out between “Koko”, south of Ahua Point and “Pālani” (a bunch of coral) “which is directly *makai* of Kumumau” suggests this point was off-shore two kilometers or more south of the central portion of the study corridor.

**Awaawaloa**, was a large fishpond 700 m north of the Lagoon Drive station (see Figure 7).

**Ka'ihikapu**, was a large fishpond 700 m south of the Honolulu International Airport Station (see Figure 3)

**Kai-iki (Kaikikapu)**, was a medium sized fishpond 700 m NE of the Lagoon Drive Station (see Figure 4)

**Kaloaloa**, was a medium sized fishpond 250 m SW of the Lagoon Drive Station (see Figure 3 and Figure 4)

**Ka'oki**, understood as a point associated with the demarcation of fishing rights “near the island of Mokuonini” (Maly and Maly 2012:513) Moku'onini is 400 m east of the Lagoon Drive Station (see Figure 3 and particularly Figure 4)

**Kauki (Keuki)**, in context this appears to be “Kaiiki” understood as a point associated with the demarcation of fishing rights in Ke'ehi Lagoon “outside of island of Mokuoēo” (Maly and Maly 2012:513). Moku'eō, was a small island 2.4 m south of the Lagoon Drive Station (see Figure 3)

**Koko**, understood as a point associated with the demarcation of fishing rights in Ke'ehi Lagoon “south of Ahua Point” (Maly and Maly 2012:513). Āhua Point is understood as a low silty sandy spit formerly on the west entrance to Ke'ehi lagoon approximately 2.25 km south of the Honolulu International Airport Station (see Figure 3)

**Kukukahi**, understood as a point associated with the demarcation of fishing rights in Ke'ehi Lagoon near Ahua Point (Maly and Maly 2012:513). Āhua Point is understood as a low silty sandy spit formerly on the west entrance to Ke'ehi lagoon approximately 2.25 km south of the Honolulu International Airport Station (see Figure 3.)

Table 2. Place Names Near Moanalua Ahupua'a (adapted from The SRI Foundation and Kumu Pono Associates LLC. 2012: B-1 to B-28; place names identified as in or near the Airport Section project area are shaded and an \* identifies indicated *wahi pana*)

<i>Inoa 'Āina</i>	<i>Ahupua'a and Description</i>	<i>Source</i>
Āhua	Moanalua-Kalihi boundary zone. A fishpond and coastal region. Cited in project area claims of the Māhele.	Maly and Maly 2012:5
Āliamanu	Moanalua. A noted <i>'ili</i> , geological feature and area of an ancient burial ground, near Leinaka'uhane and Kapukakī (on the inland side of the crater overlooking the ancient trail and government road).	Maly and Maly 2012:6
Āliapa'akai	Moanalua. A noted <i>'ili</i> , ancient crater, which once held a pond that rose and fell with the ocean's tides. Believed to have been a place visited by Pele on her migration across the Hawaiian Islands, as she looked for a home to keep her fires dry. Pele thrust her digging stick, Pā'oa, into the ground here, and her ocean-formed sister, Nāmakaokāha'i, dug in through the ocean causing a clash between fire and water. The residual salt crusted along the inner rim of the crater. And from that day forward, the lake rose and fell with the tides and salt makers worked the land here, harvesting <i>pa'akai</i> (salt) that was valued through the middle 1800s. (The lake was filled in for development in the 1970s.)	Maly and Maly 2012:6
'Au'au *	Moanalua. A cave of refuge during times of war, near the shore of Moanalua. The cave entrance was on the shore, and was connected to the uplands of Moanalua via an underground cavern. The cavern was used a route of passage by the mo'ō goddess, Kaluahine when she desired to go fishing on the shore. Cited in traditions of Moanalua by J.K. Mokumaia (1922).	Maly and Maly 2012:6
'Auwaiomiki	Moanalua. A named locality. Cited in project area claims of the Māhele.	Maly and Maly 2012:7
Awaawaloa (Awawaloa) *	Moanalua. A fishpond and land area. Cited in project area claims of the Māhele.	Maly and Maly 2012:7
Homahoma	Moanalua. An <i>'ili</i> . Cited in claims of the Māhele.	Maly and Maly 2012:9
Ho'ōlaiwi	Moanalua. An <i>'ili</i> . Cited in claims of the Māhele.	Maly and Maly 2012:10

<i>Inoa 'Āina</i>	<i>Ahupua'a</i> and Description	Source
ʻĪemi	Moanalua. A storied spring and <i>'ili</i> . Cited in claims of the Māhele (apparently transposed a “Umi” in some Māhele records). Cited in traditions by J.K. Mokumaia (1922).	Maly and Maly 2012:11
ʻĪna'ikōlea	Moanalua. An <i>'ili</i> . Cited in claims of the Māhele.	Maly and Maly 2012:11
Ka'aiulua	Moanalua. A land area. Cited in claims of the Māhele.	Maly and Maly 2012:11
Ka'auku'u	Moanalua. An <i>'ili</i> . Cited in claims of the Māhele.	Maly and Maly 2012:11
Kahaiao	Moanalua. An <i>'ili</i> . Cited in claims of the Māhele.	Maly and Maly 2012:12
Kahauiki (Hauiki)	Moanalua Boundary. A <i>'ili</i> and <i>kula</i> (flat land) along the Kalihi boundary of Moanalua. Cited in <i>mele</i> , traditions and claims of the Māhele. “Kahauiki Stream irrigated a moderate-sized area of terraces extending from the sea inland for about half a mile.” (Handy, 1940: 79)	Maly and Maly 2012:13
Ka'ihikapu	Moanalua. A large fishpond salt making/collection site, reportedly built by Ka'ihikapu Manuia (Kalanimanu'ia) A named locality cited in project area claims of the Māhele.	Maly and Maly 2012:14
Kai-iki	Moanalua. A named locality. Cited in project area claims of the Māhele.	Maly and Maly 2012:14
Kaleinaaka'uhane *	Moanalua-Hālawā boundary zone. This site situated on the inland side of Āliamanu, by Kapukakī and Leiolono is a leaping place for the spirits of the dead ( <i>leina a ka 'uhane</i> ). Some passed this leaping place, went on to the care of their <i>'aumakua</i> , others, who had no one to help them, drifted down to Kaupe'a, Kama'oma'o, and Kānehili (the plains around Pu'u o Kapolei), where they would wander aimlessly in hope that someone would direct them to the spirit world.	Maly and Maly 2012:16

<i>Inoa 'Āina</i>	<i>Ahupua'a</i> and Description	Source
Kaloalua	Moanalua. An <i>'ili</i> and large fishpond. Noted for the quality of <i>awa</i> ( <i>Chanos chanos</i> ) fish grown there. Cited in traditions and a named locality in project area claims of the Māhele.	Maly and Maly 2012:16 (citing <i>Ke Au Okoa, Iulai 31, 1865</i> )
Kalou	Moanalua. An <i>'ili</i> . Cited in claims of the Māhele.	Maly and Maly 2012:17
Kāne'ohē	Moanalua. An <i>'ili</i> . Cited in claims of the Māhele.	Maly and Maly 2012:19
Kaniu	Moanalua. An <i>'ili</i> . Cited in claims of the Māhele.	Maly and Maly 2012:19
Ka'oki	Moanalua. A named locality. Cited in project area claims of the Māhele	Maly and Maly 2012:20
Kapukakī (Keka'anī'auokapukakī)	Moanalua-Hālawā. A wahi pana boundary marker between the Kona and 'Ewa Districts; situated on the upland side of Āliamanu near an ancient burial ground. (see also Kaleinaaka'uhane and Leiolono)	Maly and Maly 2012:21
Kauki (Keuki)	Moanalua. A named locality. Cited in project area claims of the Māhele (boundary zone).	Maly and Maly 2012:23
Kauwālua (Kauālua) (written "Kanalua" in later texts)	Lapakea, Moanalua. Situated on the <i>mauka</i> side of the old trail to 'Ewa. Kauwālua was an ancient battle ground and favored traditional residence of chiefs of O'ahu. Following Kahahana's death, Kalai-koa, a Maui chief who served Kahekili, took up residence here. He had a house made with the bones of defeated O'ahu warriors and chiefs. The house was also enclosed by a fence of human bones with the skulls placed on top of the bundles of bones. (S.M. Kamakau, <i>Nupepa Kuokoa, Maraki 30, 1867, 1961:138-139</i> ; also in several historical accounts. Note: In several later published accounts the first letter "u" in "Kauwālua" was transposed in typesetting to an "n.")	Maly and Maly 2012:24

<i>Inoa 'Āina</i>	<i>Ahupua'a and Description</i>	<b>Source</b>
Kealalau	Moanalua. An <i>'ili</i> . Cited in claims of the Māhele.	Maly and Maly 2012:25
Kiao	Moanalua. An area associated with Leiolono and Kapukakī, noted for the <i>'ulalena</i> (reddish-yellow tinged) rains.	Maly and Maly 2012:27
Koko	Moanalua. A named locality. Cited in project area claims of the Māhele.	Maly and Maly 2012:28
Kuai'awa	Moanalua. A land area. Cited in claims of the Māhele.	Maly and Maly 2012:28
Kū'aunui	Moanalua. An <i>'ili</i> . Cited in claims of the Māhele.	Maly and Maly 2012:28
Kukukahi	Moanalua. A named locality. Cited in project area claims of the Māhele.	Maly and Maly 2012:29
Kumuma'u *	Moanalua-Hālawa boundary zone. Situated on the former shore line, just above the place called Pālani. Cited in the tradition of Puhī o Laumeki. A named locality cited in project area claims of the Māhele.	Maly and Maly 2012:29
Leiolono (Leilono/Leinono) *	Moanalua. Named for an ancient god, guardian of a deep pit filled with the bodies of dead people. Leiolono is situated on the inland side of Āliamanu. Here, spirits of the dead, those who did not have helpful <i>'aumākua</i> would be lost. Leiwalo was on the eastern boundary of Leiolono, and Kapapakōlea was the eastern boundary (see also Kaleinaaka'uhane and Kapukakī). Cited in S.M. Kamakau, <i>Nupepa Ke Au Okoa, Okatopa</i> 6, 1870; and the tradition of Makanike'oe.	Maly and Maly 2012:31
Leiwalo ('Uluoleiwalo) *	Moanalua. Once spirits passed through Leiolono, they would find themselves on the <i>'ulu</i> (breadfruit) tree, Uluoleiwalo. If leaping from the wrong branch, the soul would be lost forever in the realm of Milu. If leaping from the correct branch, the spirit would find helpful <i>'aumākua</i> to guide them to the desired realm. Cited in S.M. Kamakau, <i>Nupepa Ke Au Okoa, Okatopa</i> 6, 1870; and the tradition of Makanike'oe.	Maly and Maly 2012:31

<i>Inoa 'Āina</i>	<i>Ahupua'a</i> and Description	Source
Lelepaua	Moanalua. A large fishpond and salt making area, built by Ka'ihikapu Manu'ia (Kalanimanu'ia). Cited in Boundary Commission proceedings. A named locality. Cited in project area claims of the Māhele.	Maly and Maly 2012:31
Mā'ili	Moanalua. An 'ili. Cited in claims of the Māhele.	Maly and Maly 2012:31
Manawainuikeo'o	Moanalua. An underground cave to the ocean, that comes out at Āliapa'akai. Cited in the tradition of Makanike'oe.	Maly and Maly 2012:33
Māpunapuna	Moanalua. An 'ili land division and large fishpond extending to the shore of Moanalua. The pond of Māpunapuna was famed for its 'ama'ama (mullet) fish. Cited in traditions; and a named locality cited in project area claims of the Māhele.	Maly and Maly 2012:33
Moanalua *	<i>Ahupua'a</i> . "Inland of what is now Moanalua Park is a moderate-sized area of terraces. Mokumaia writes that Moanalua took its name from two taro patches watered by 'Īemi Spring: 'The name Moanalua came from two taro patches close to the road taken by travelers from Ewa. They were very close to the spring of Iemi. When the travelers came to the place just mentioned, they found the taro leaves so large that the keepers groped in the dark for taro for the chiefs. The taro and oha grew close together and that is how it [Moanalua] got its name which has remained famous to this day...'These terraces are now planted in wet taro by Chinese, and are irrigated with water from Kalou Stream, which empties into Moanalua Stream three quarters of a mile inland. The large area southwest of lower Moanalua Stream, which is now partly park and partly planted to bananas, was formerly all taro terraces. Most of this area to seaward is still planted in flourishing taro grown by Chinese. There are also extensive irrigated patches east of the lower course of the stream which presumably used to be taro beds but are now partly planted in rice and partly unused.'" (Handy, 1940:80)	Maly and Maly 2012:33 - 34
Mokumoa	Moanalua. A named locality. Cited in project area claims of the Māhele.	Maly and Maly 2012:34

<i>Inoa 'Āina</i>	<i>Ahupua'a</i> and Description	Source
Moku'eō	Moanalua. A named locality. Cited in project area claims of the Māhele.	Maly and Maly 2012:34
Moku'onini	Moanalua. A named locality. Cited in project area claims of the Māhele.	Maly and Maly 2012:34
Niuho'okahi	Moanalua. An <i>'ili</i> . Cited in claims of the Māhele.	Maly and Maly 2012:36
Pahunui	Moanalua. A named locality. Cited in project area claims of the Māhele.	Maly and Maly 2012:37
Pālani	Moanalua. A named locality. Cited in project area claims of the Māhele.	Maly and Maly 2012:37
Pililua	Moanalua. A cave in which King Kahahana, his wife Kekuapo'i, and Alapa'i hid for a time, following the conquest of O'ahu by the forces of Kahekili. Cited in the account of Makanike'oe	Maly and Maly 2012:38
Pōhāhā	Moanalua. An <i>'ili</i> . Cited in claims of the Māhele.	Maly and Maly 2012:39
Waiola	Moanalua. A pond at the place in Moanalua Valley where the two streams join together. The water of this pond was noted for its healing qualities. Cited in historical accounts.	Maly and Maly 2012:44
Weli	Moanalua. A named locality. Cited in project area claims of the Māhele.	Maly and Maly 2012:45

\*indicates a *wahi pana* (see Figure 5 and Figure 6)

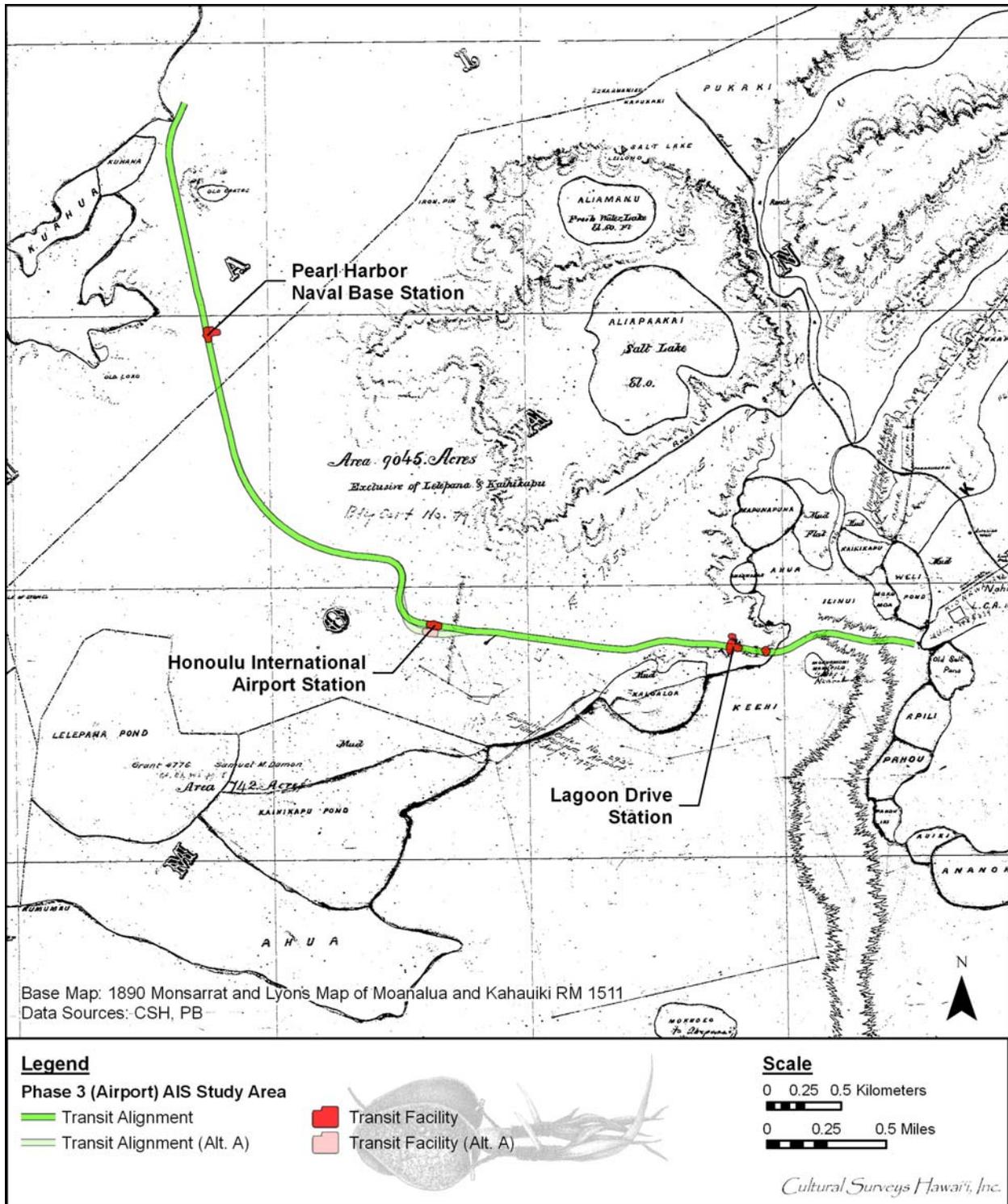


Figure 3. 1890 Monsarrat and Lyons map of Moanalua and Kahauiki

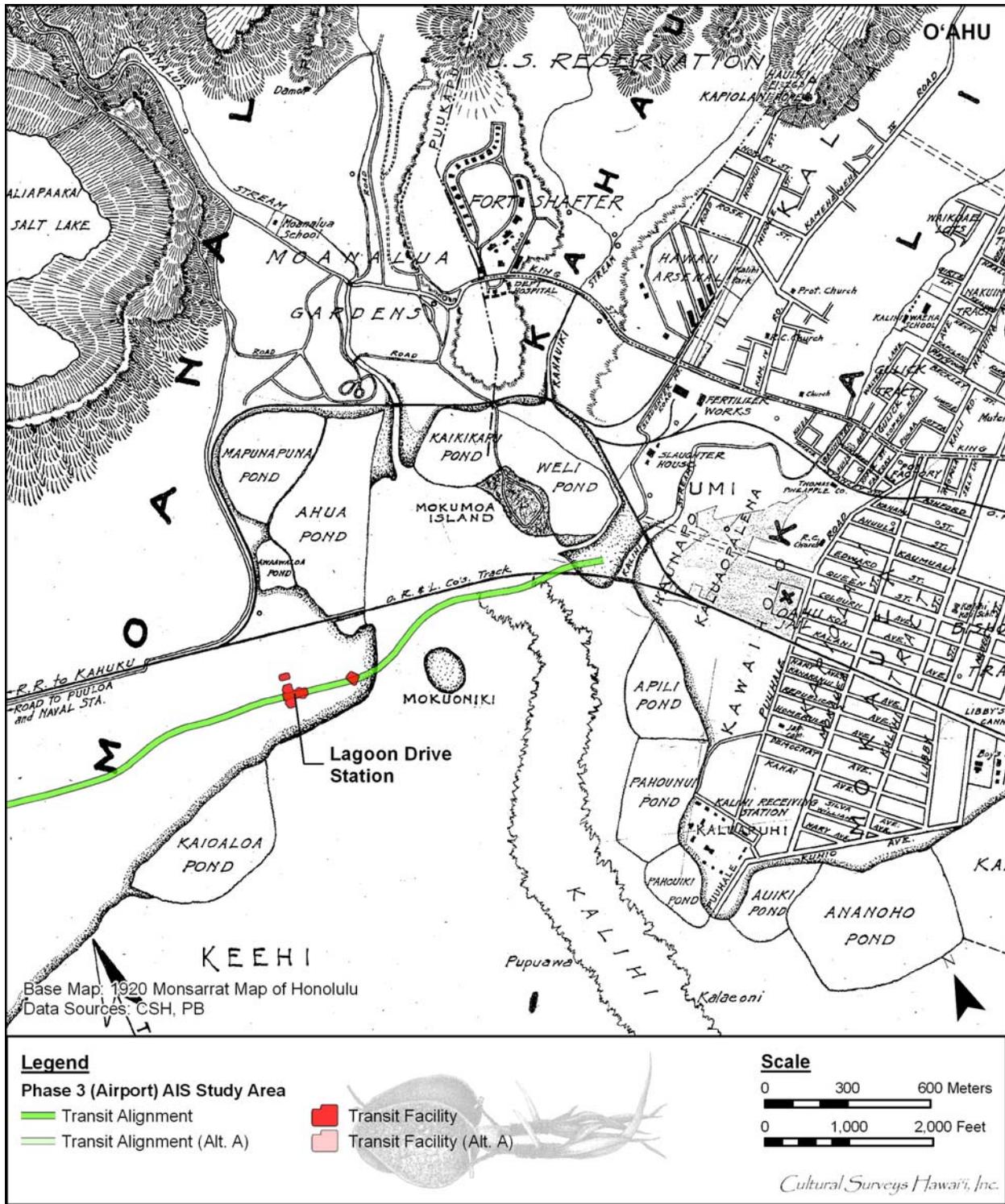


Figure 4. 1920 Monsarrat Honolulu District Map

**Kumuma'u**, “Stone on wall of Loko Ahua marking boundary between Moanalua and Hālawā” (Maly and Maly 2012:504 see also 511). The Ahua Pond was located 200 m NE of the Lagoon Drive Station (see Figure 3).

**Lelepaua**, was a large fishpond 1.5 km SW of the Honolulu International Airport Station (see Figure 3)

**Māpunapuna**, was a medium sized fishpond 600 m north of the Lagoon Drive Station (see Figure 3 and Figure 4)

**Mokumoa**, was a small island 1.1 km NE of the Lagoon Drive Station (see Figure 4)

**Mokuo'eō**, was a small island 2.4 m south of the Lagoon Drive Station (see Figure 3)

**Moku'onini (Mokuoniki)**, was a small island 400 m east of the Lagoon Drive Station (see Figure 3 and particularly Figure 4)

**Pahunui (Pahounui)**, was a medium sized fishpond 600 m SE of the east end of the Airport Section (see Figure 4).

**Pālani**, understood as a point associated with the demarcation of fishing rights “a bunch of coral which is directly south of, or *makai* of Kumuma'u” (Maly and Maly 2012:513). Exact location is uncertain but as it is *makai* of Kumumau it would be more than two kilometers south of the study corridor.

**Weli**, was a medium sized fishpond 100 m north of the east end of the Airport Section See Figure 4).

The main point in this discussion of the *Inoa 'Āina* Place Names of Moanalua Ahupua'a is that there are a great many associated with the seaward portion of the confluences of Moanalua Stream, Kahauiki Stream, and Kalihi Stream where there was fresh water, where people lived and raised fish in fish ponds and exercised fishing rights in the lagoon. Of these twenty indicated place names only one (Lelepaua Pond, 1.5 km SW of the alignment) is not located on the immediate margin of Ke'ehi Lagoon or off-shore far to the south.

Clearly the well watered lands of Moanalua, Kahauiki and Kalihi and the virtual ring of fishponds surrounding Ke'ehi lagoon must have supported a large population may well have been a foci of early settlement. Kaloalua Fishpond was probably less than 200 m to the south of the Airport section just west of the Lagoon Station. Most of the rest of the *Inoa 'Āina* Place Names of Moanalua Ahupua'a were at some remove. Most of this cultural landscape would have been buried under thick fill in 1942/1943.

The confluence of Moanalua and Kalihi Stream must have been an attractive area in pre-Contact Hawaii. The reverend Hiram Bingham noted that the *muliwai* (backwater estuaries) of Moanalua and Kalihi (see Maly and Maly 2012:168). The extensive fishponds are understood to have been the property of the *ali'i* of long-standing (see Maly and Maly 2012:171) and the extent to which the *maka'āinana* as a whole profited from these fishponds remains a matter of some debate.

## ***Wahi Pana***

The *ahupua'a* of Hālawā and particularly Moanalua Ahupua'a are rich with traditional associations and rich with *wahi pana* or “storied places”. Many of these *wahi pana* are located in the following Figure 5 through Figure 7, which show their posited location in reference to the present Transit study corridor. The reader is referred directly to the Maly and Maly (2012) study for detail on the abiding relationship between Hawaiians and the *‘āina* and only an overview focused specifically on the Transit corridor is presented here.

The SRI Foundation and Kumu Pono Associates LLC. (2012) study posits 26 individual *wahi pana* in or near the first three construction phases of the project area (roughly those lands west of Kalihi Stream. The nearest one outside of the Airport phase, Kauahipu'upu'u in 'Aiea Ahupua'a, lies approximately a kilometer to the northeast of the northwest end of the Airport phase. One of the 26 *wahi pana* cited lies within Moanalua Ahupua'a and none lie within Hālawā Ahupua'a. The one *wahi pana* within Moanalua is named “‘Au‘au” and is described as:

A cave of refuge during times of war, near the shore of Moanalua. The cave entrance was on the shore, and was connected to the uplands of Moanalua via an underground cavern. The cavern was used [as] a route of passage by the mo'ō goddess Kaluahine when she desired to go fishing on the shore. Cited in traditions of Moanalua by J. K. Mokumaia (1922). (SRI Foundation and Kumu Pono Associates LLC. 2012:43)

The posited location of the 'Au'au cave of refuge (numbered “42”) is shown on Figure 7 as possibly extending to as close as 100 m north (*mauka*) of the Transit corridor approximately 500 m ENE of the Lagoon Drive Station.

Such fabulous caverns with underground trails are a common theme in Hawaiian legends. Maly and Maly (2012:100) cite a lengthy account from the Hawaiian language newspaper *Nupepa Ka Oiaio* (*Ianuali* 5 1894-*Mei* 10, 1895) by Moses (Mose) Manu of the travels of a certain Makanike'oe. Having landed at Kalihi “outside of Keahua, at the place called Keawakalai. There he saw a crevasse open in the sea...Makanikeoe crawled along one of the crevasses in the sea, and going beneath the land, he exited out at Aliapaakai” While this cave is not called “‘Au'au”, it is notably entered by swimming which has a certain resonance (*'Au'au* meaning “to bathe”; *'Au* meaning “To swim, to travel by sea”). The fact that the natural “Kalihi Channel” (see Figure 3 and Figure 4) angles towards the salt lake of Āliapa'akai would certainly suggest such a connection as a subterranean passage.

Maly and Maly (2012:197) cite another account from the Hawaiian language newspaper *Kuokoa* by J. Kulia Mokumaia from February 17<sup>th</sup> to June 29<sup>th</sup> 1922. The core account supporting the 'Au'au Wahi Pana is given below:

It was said that an old woman lived by the stream close to the hill. In the middle of the hill was a cave in which she lived. Sometimes she was said to assume the form of a lizard for she was a supernatural being. When the people who lived on Kamaikai (that is the gulch with the Wai-a-puka pools) came down and passed the old woman's home, she asked, “Are you going to the beach?” They said, “Yes. We are going to gather sea weeds, and some, squid. While we were in the

uplands we had a desire for sea foods and this is the reason for this big company of people.” “Yes, I see that you are a big company.”

This woman was not a mischief maker but used her mana, so the natives said. As the big company went down, she sat on a long stone in the middle of the stream. She sat there until the last of the company passed and then moved back and vanished out of sight. She came out down below at Auau. The place was said to be a cave used in war times. This spot is where the train comes to from Kuwili to the sea channel of Moanalua. The train reaches that side of the land and goes on to Puuloa. The point that juts out just there has a cave. The old woman came out there and sat above it. She sent her eyes to go and catch her some fish and she sat there totally blind. No one thought that her eyes had caught her any fish for when the company returned, she was already at home scaling fish. Some of the people wondered at this and talked it over among themselves. This occurred whenever she wanted fish. She went down the short cut. That was the most wonderful thing. Another strange thing was that this old woman did was to change herself into a lizard. She assumed many other forms and the best of all was that she didn't harm anyone. The place where she lived was on the path taken by the people of Ewa when they ascended. The bone fence of the bad chiefs of the valley of Kamaikai was also near. (Kuokoa April 7 (page 2) and April 21 (page 3), 1922 Pukui, translator, 1978:333) (quoted in Maly and Maly (2012:197)

A fairly clear geographic reference is given to the point on the west side of Ke'ehi Lagoon just to the south of where the OR&L causeway reached the land of Moanalua (see Figure 4).

It may be noted that both Hālawā and Moanalua were famous for their traditional Hawaiian fishponds (which lie both to the south /*makai* and north /*mauka*) of the Airport phase segment of the transit corridor. Fishponds are often considered to be *wahi pana* in and of themselves or because they are often associated with stories. The Airport phase at this segment of the transit corridor does not cross any fishponds.

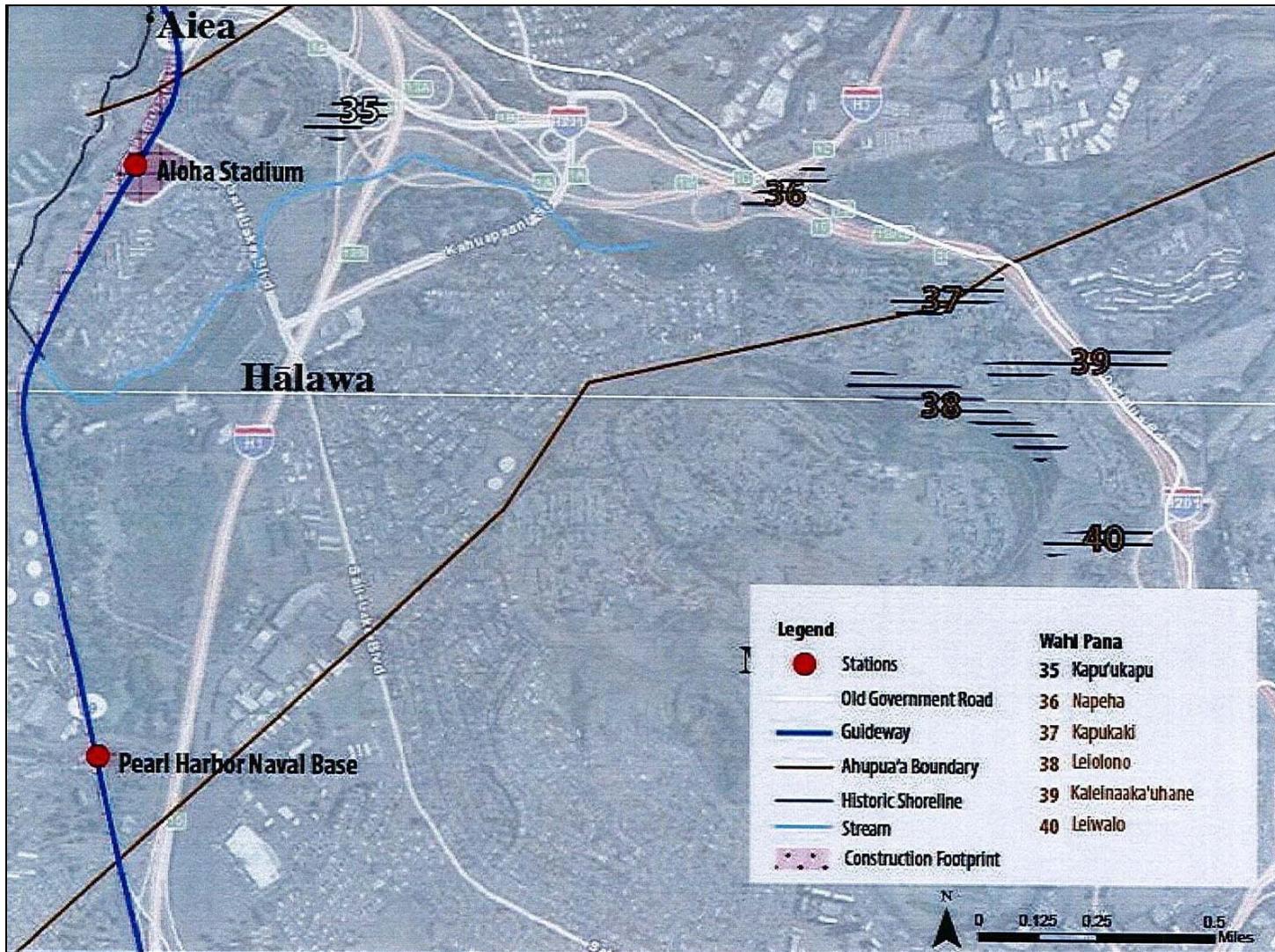


Figure 5. *Wahi Pana* of Hālawā Ahupua'a and western Moanalua Ahupua'a (as reported by The SRI Foundation and Kumu Pono LLC 2012: E-9)

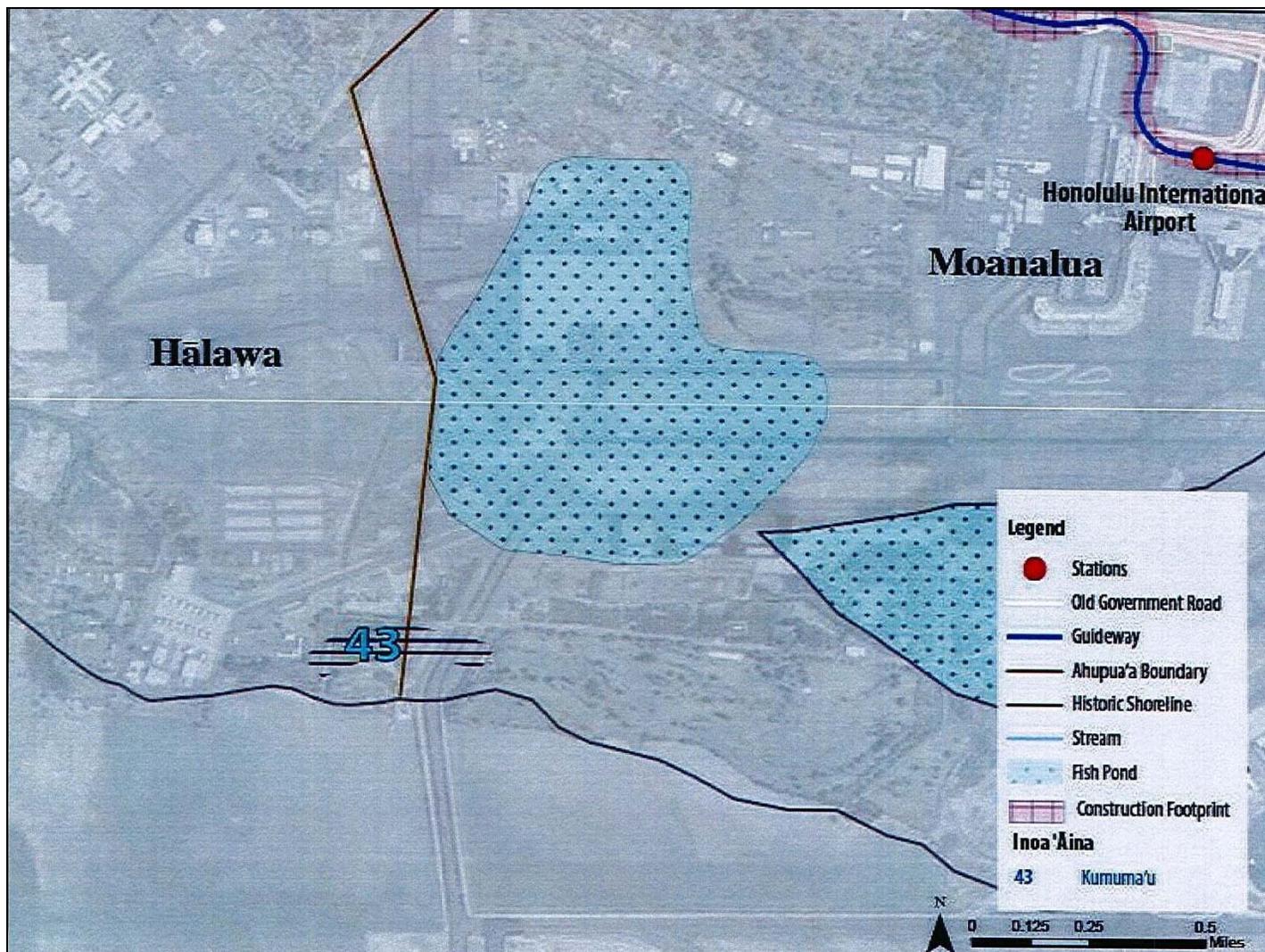


Figure 6. *Wahi Pana* of coastal, eastern Hālawā Ahupua'a and coastal western Moanalua Ahupua'a (as reported by The SRI Foundation and Kumu Pono LLC 2012: E-10)

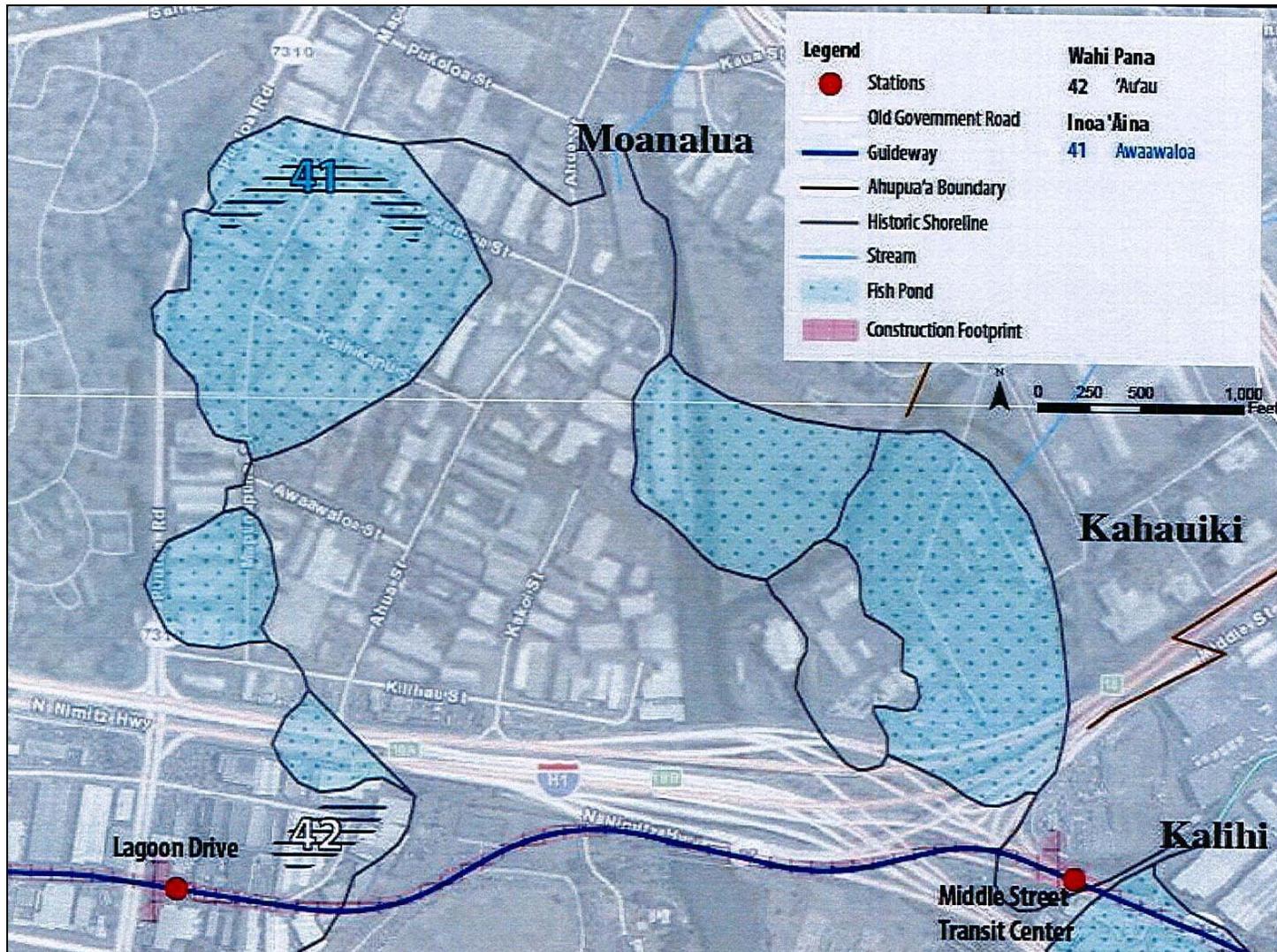


Figure 7. *Wahi Pana* of coastal western Moanalua Ahupua'a and southern Kahauiki Ahupua'a (as reported by The SRI Foundation and Kumu Pono LLC 2012: E-10)

## **Allen et al. 2005 Traditional Cultural Places Study**

Under contract with the Department of the Navy the International Archaeological Research Institute Inc. (Allen et al. 2005 ) produced A Study of Native Hawaiian Traditional Cultural Places, Hickam Air Force Base, Hālawā and Moanalua Ahupua‘a, ‘Ewa and Kona Districts, O‘ahu Hawai‘i. The study examined 25 places in seaward Hālawā and Moanalua Ahupua‘a “that appeared likely at the outset of the project to qualify as TCPs [Traditional Cultural Properties].” Fourteen of these were recommended as potential TCPs (Figure 8, Table 3).

It is notable that all fourteen of the potential TCPs are pretty much right on the coast (Figure 6) and none are within 2.5 kilometers of the Transit corridor.

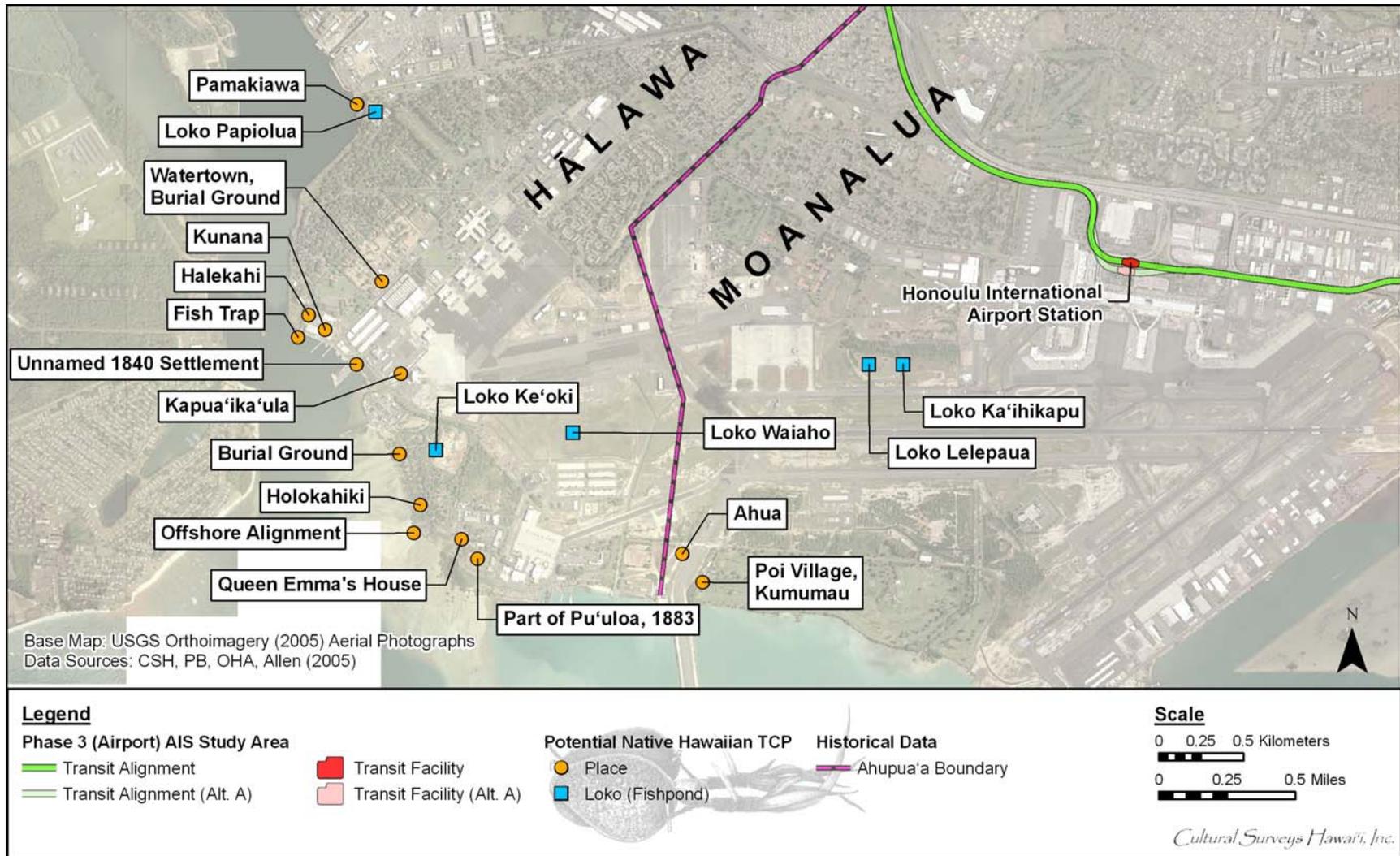


Figure 8. Transit alignment in relation to 14 places recommended as potential Traditional Cultural Properties at the former Hickam Air Force Base (now a part of Joint Base Pearl Harbor Hickam) (adapted from Allen et al. 2005:99)

Table 3. Potential TCPs within (the former Hickam AFB Portion of JBPHH (in Hālawā and Moanalua Ahupua‘a, organized alphabetically by place name; adapted from Allen et al. 2005:89 & 90)

<b>Place</b>	<b>Location in (In), Partially in (Part). Or Offshore by Hickam AFB</b>	<b><i>Ahupua‘a</i></b>	<b>NRHP Criterion (-a) A (Events) B (People) C (Art, Period, Style) D (Information)</b>	<b>Notes for Criteria A-C (Justification, Associations)</b>	<b>Physical condition</b>
Burial ground at Fort Kamehameha	In	Hālawā	D		Portions preserved
Entrance to Pu‘uloa Lagoon (Pearl Harbor); see Pu‘uloa, below, for land divisions	Offshore; also offshore from Honouliuli	Hālawā	B & D		Possibly intact
Fishponds, generally	Part	Hālawā and Moanalua	A & D	Development of fishponds, aquaculture	Most filled, developed
Hālawā Ahupua‘a Hālawā	Part	Hālawā	B & D		Various; most Hickam AFB portions developed
Hickam Air Force Base as <i>kapu</i> Crown lands	In	Hālawā and Moanalua	B & D		Most areas developed
Kapua‘ika‘ula Kapua‘ikāula Kapuaikaula (battlefield, settlement)	In	Hālawā	B & D		developed

Place	Location in (In), Partially in (Part). Or Offshore by Hickam AFB	<i>Ahupua'a</i>	NRHP Criterion (-a) A (Events) B (People) C (Art, Period, Style) D (Information)	Notes for Criteria A-C (Justification, Associations)	Physical condition
Loko Ka'ihikapu Kaihipapu	In	Moanalua	A, B & D	Development of fishponds; Ka'ihikapu a Manuia	
Loko Lelepaua	In	Moanalua	A, B & D	Development of fishponds; Ka'ihikapu a Manuia	
Loko Waiaho, also "Queen Emma's Pond" Wai a aha	In	Hālawā	B & D	Queen Emma	filled
Moanalua Ahupua'a	Part	Moanalua	A, B & D	Battles; important legendary figures; Kākuhihewa	Various; most Hickam AFB portions developed
Pāmakiawa Pamakiawa Pa Makiawa (fish trap)	Offshore	Hālawā	B & D	Kāne, Kanaloa	Reportedly destroyed; area developed

Place	Location in (In), Partially in (Part). Or Offshore by Hickam AFB	<i>Ahupua'a</i>	NRHP Criterion (-a) A (Events) B (People) C (Art, Period, Style) D (Information)	Notes for Criteria A-C (Justification, Associations)	Physical condition
Pu'uloa Puuloa (region); see entrance, above, for lagoon	Part	Hālawa and Moanalua	A, B & D	Settlements; association with goddesses, <i>mo'o</i> , shark deities; battleground where Kahekili conquered Kahahana	Various, most areas developed
Queen Emma's house (structure)	In	Hālawa	B & D	Queen Emma	destroyed
Watertown (settlement)	In	Hālawa	A & D	Development of Pearl Harbor	Buildings destroyed; roads in use

## Ka'imipono Consulting Services 2008 Study

Under contract to the City and County of Honolulu, Ka'imipono Consulting Services (2008) carried out a Cultural Resources Technical Report identifying cultural resources, practices, and beliefs that may be affected by the HHCTTC Project.

One aspect of this study was to produce a summary of cultural resources and practices "within the 500-foot APE around the proposed stations" that are presented by *ahupua'a*. The resources reported for the Airport alignment Section are summarized below.

Table 4. Summary of Cultural Resources and Practices Identified Near the Airport Section  
(adapted from Ka'imipono Consulting Services 2008:4-37 & 4-38)

<i>Ahupua'a</i>	Resource	Type
Hālawa	Hālawa Stream	Resource (water)
Hālawa	Pearl Harbor Kai Elementary School	Practice
Hālawa	Richardson Park and Pool	Practice
Hālawa	Arizona Memorial Access & Bowfin Museum	Historic
Hālawa	Cincpac Command Headquarters	Practice
Moanalua	Holy Family Catholic Academy	Practice
Moanalua	Ke'ehi Lagoon Park	Practice
Moanalua	Disabled American Veterans' Hall	Practice
Moanalua	Ke'ehi Lagoon Park Canoe Facility	Practice
Moanalua	Assets School	Practice
Moanalua	Nimitz Elementary School	Practice
Moanalua	Pearl Harbor Elementary School	Practice

Of the twelve cultural resources and practices identified near the Airport Section it appears that only Hālawa Stream and the Ke'ehi Lagoon Park/ Ke'ehi Lagoon Park Canoe Facility relate directly to locales of traditional Hawaiian cultural landscapes. The archaeological inventory survey of both of these areas documents that they have been massively transformed by twentieth century fill activities and developed minimal information regarding cultural practices.

A component of this study was an oral history project with transcripts presented in Appendix F. An interview with Mr. Shad Kane provides details regarding the cultural traditions associated with Leilono at Āliamanu at Moanalua (F-24, F-25, F-28). While certainly a storied place or *Wahi Pana* in the Hawaiian past this area is understood as about 2.8 kilometers east of the Transit corridor (see Figure 5) and as not affected by the transit project.

Mr. Kane does go on to discuss the seaward portion of the boundary between Hālawa Ahupua'a of 'Ewa District and Moanalua Ahupua'a of Kona District. His account is given below:

.. After much research it was learned that the moku boundary between 'Ewa and Kona (Honolulu) has changed several times. Today the moku boundary parallels the fence line dividing Pearl Harbor Naval Shipyard from Hickam Air Force Base. However upon further investigation it was learned that anciently the actual boundary was 1 mile east of the fence separating the bases. It allowed both 'Ewa and Kona to share in the inland fish ponds of Lelepaua and Ka'ihikapu which were built by Ka'ihikapu-a-Manuia who was the son of Kalaimanuia and the father of Kakuhihewa. Those fishponds which were 332 and 258 acres respectively now lie beneath the tarmac of both Hickam AFB and the Honolulu International Airport. The auwai are still there today and exit Mamala Bay and Keehi Lagoon. You can still see them today on your occasional flights off island. Kapua'ikaula is Hickam Air Force Base. The ancient moku boundary between 'Ewa and Kona used Kapua'ikaula as a description of that division. Today the center of Kapua'ikaula would be in the approximate location of Hickam Harbor Beach adjacent to the reef runway. Is it any wonder why there is a street name of Pu'uloa in Mapunapuna?

[Re: current cultural practices] Since 2002 the O'ahu Council of Hawaiian Civic Clubs and the 15th Airbase Wing Commander of Hickam Air Force Base has been sponsoring an annual Makahiki at Kapua'ikaula. The Makahiki is an ancient, annual festival that was dedicated to Lono, the deified guardian of agriculture, rain, health and peace. For over two thousand years, the significance of Lono and his contributions to the beliefs and practices of the early Hawaiian people, influenced the celebration of events held during the Makahiki Festival throughout the Hawaiian Islands. According to the ancient lunar calendar of Hawai'i, the beginning of the Hawaiian new year began on the first night of the rising of the star constellation Makali'i (Pleiades). The four months following the rise of the Makali'i (from October to the end of January) was set aside as a time for Lono to give thanksgiving for the bounty of the land and sea. Since Lono was the embodiment of all the characteristics of peace and welfare, all warfare was strictly forbidden during the time of the Makahiki. Since Lono represented the spiritual life-force that came out of all agricultural efforts, much feasting of every kind was done during the four months of the Makahiki. This focus on health and welfare made games of skill that tested a healthy body and mind which is a focal point of the Makahiki games. It was here at Kapua'ikaula, some 250 years and earlier where the Makahiki Festival was celebrated. Other places in 'Ewa where the Makahiki games were played were Puuokapolei, Waikele, Waipio and Puuloa. (Kaimipono Consulting Services 2008: F-31).

Mr. Kane's account draws attention to the Hālawa/Moanalua *ahupua'a* (which is also the 'Ewa/Kona *moku* or district) boundary as a focus of traditional Hawaiian activity. This merited another look at the survey results (T-012) and the historic record in the vicinity of the posited boundary but there is no clear evidence of any cultural practices in that portion of the posited *ahupua'a* boundary traversed by the Transit corridor.

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