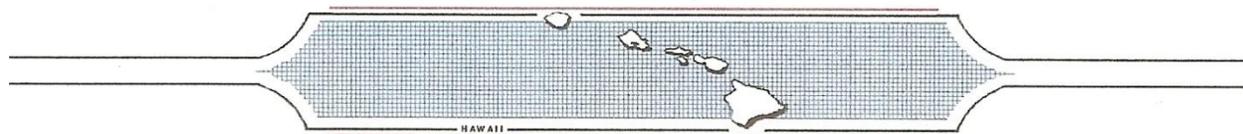


SCIENTIFIC CONSULTANT SERVICES Inc.



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

Richard Wheelock
Kona Three, LLC
Richard@eastwestrealty.org
808-753-3167

11/10/2019

**RE: Parallel Walls Site #50-10-37-30595, -30601, and -31182 (Features 2 and 3)
Wall Type, Function and Age, Located on 76.122 Acres of Land in Hōlualoa 1st
Ahupua'a, Kailua-Kona, North Kona District, Hawai'i Island [Portions of TMK: (3)
7-6-021:016 and 017 (por.)].**

Aloha e Richard,

At your request, Scientific Consultant Services, Inc. (SCS) conducted a study of parallel wall sites located on your property referenced in the subject heading of this letter report (Figure 1 through Figure 3). The study was conducted to address specific public comments submitted in response to the Draft Environmental Assessment (DEA). In, particular, this report addresses comments that the DEA and archaeological studies conducted within the project area did not address the entire project area, and that there is an ancient *hōlua* slide within the project area that was not recorded in the archaeological studies.

Project Archaeological Studies

There were three archaeological studies conducted within the DEA project area (Figure 4, numbers 1 through 3). Lands of the project area were first subject to an AIS study conducted by Hammatt et al. (1992) (see Figure 4 study #1). The current project area is located within the northern portion of the Hammatt et al. (1992) AIS project area. The AIS study encompassed 66.039 acres of land within the current project area located between 320 to 690 feet (98 to 210 meters) amsl [TMK: (3) 7-6-021:016 and 017]. Five acres within the southeast corner of the DEA project area were not included in the AIS study. The entire project area was subjected to a pedestrian survey and twenty one archaeological sites were recorded in the AIS report. There were no *hōlua* identified in that study. The AIS report recommended no further work at all 21 sites.

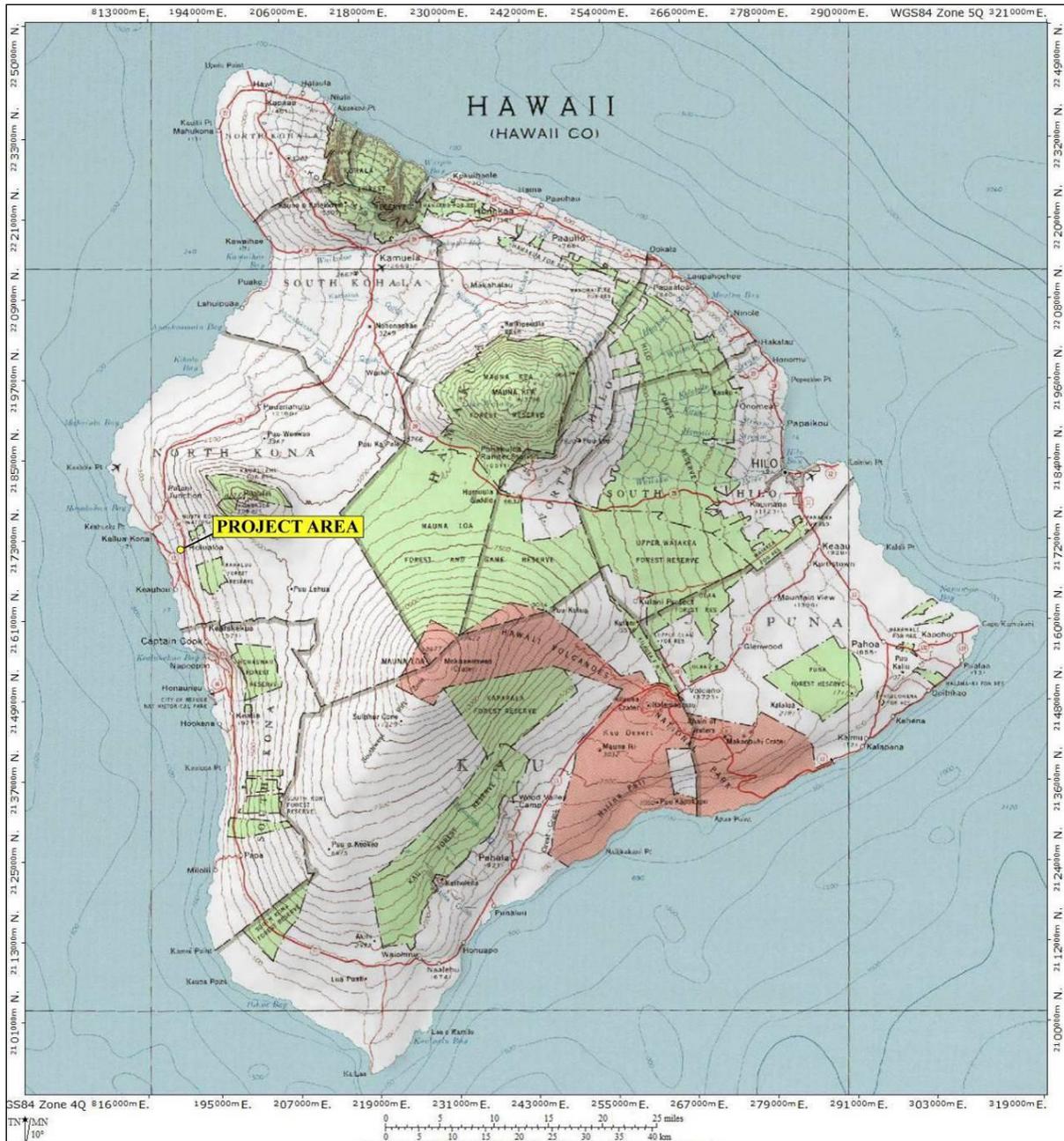


Figure 1: 5,500 K-Series Map of Hawai‘i Island Showing Location of Project Area (National Geographic Topo!, 2003. Data Sources: National Geographic Society, USGS).

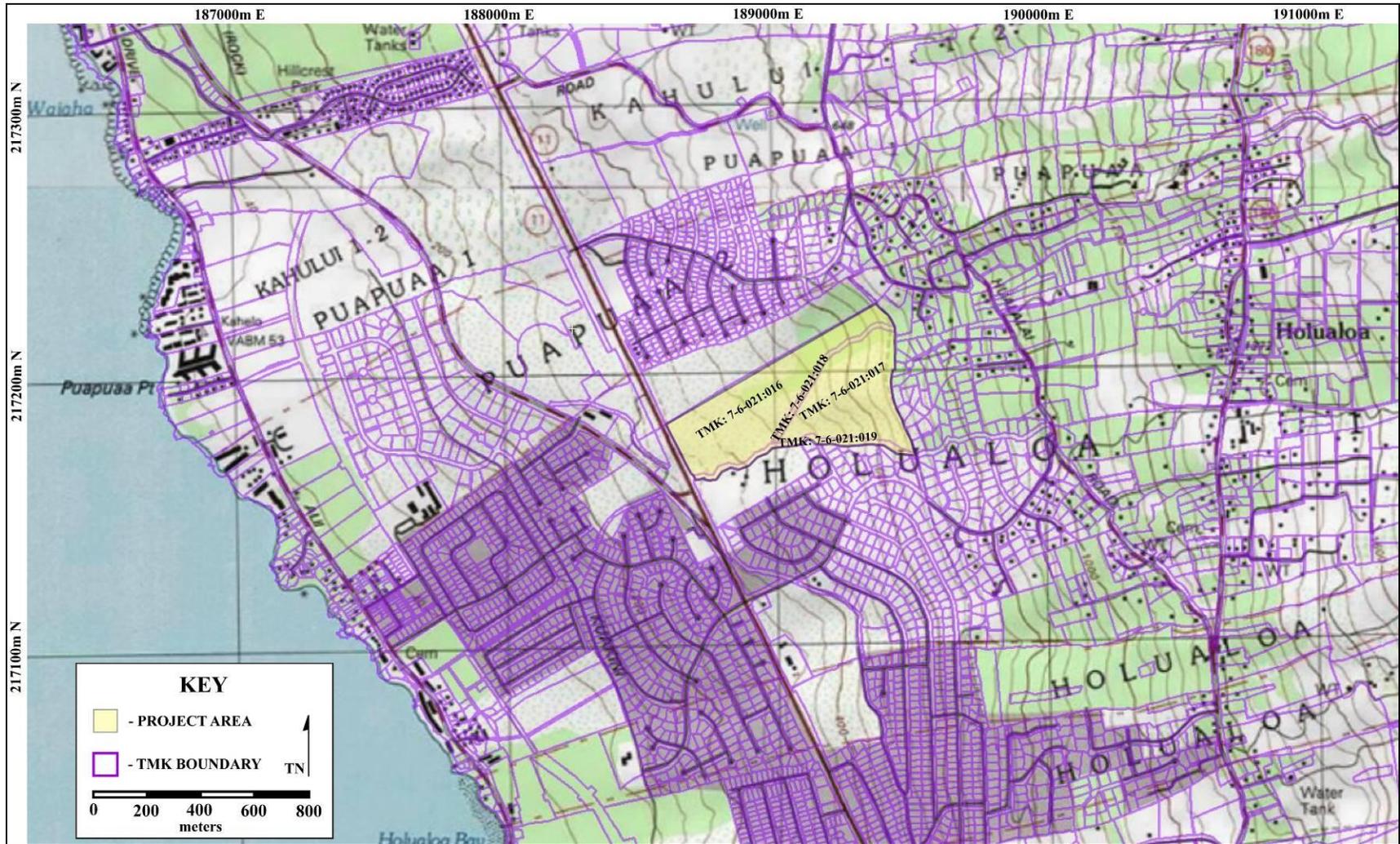


Figure 2: 7.5-Minute Series USGS Topographic Map Showing Location of Project Area (Kealakekua Quad, ESRI, 2013. Data Sources: National Geographic Society, USGS).

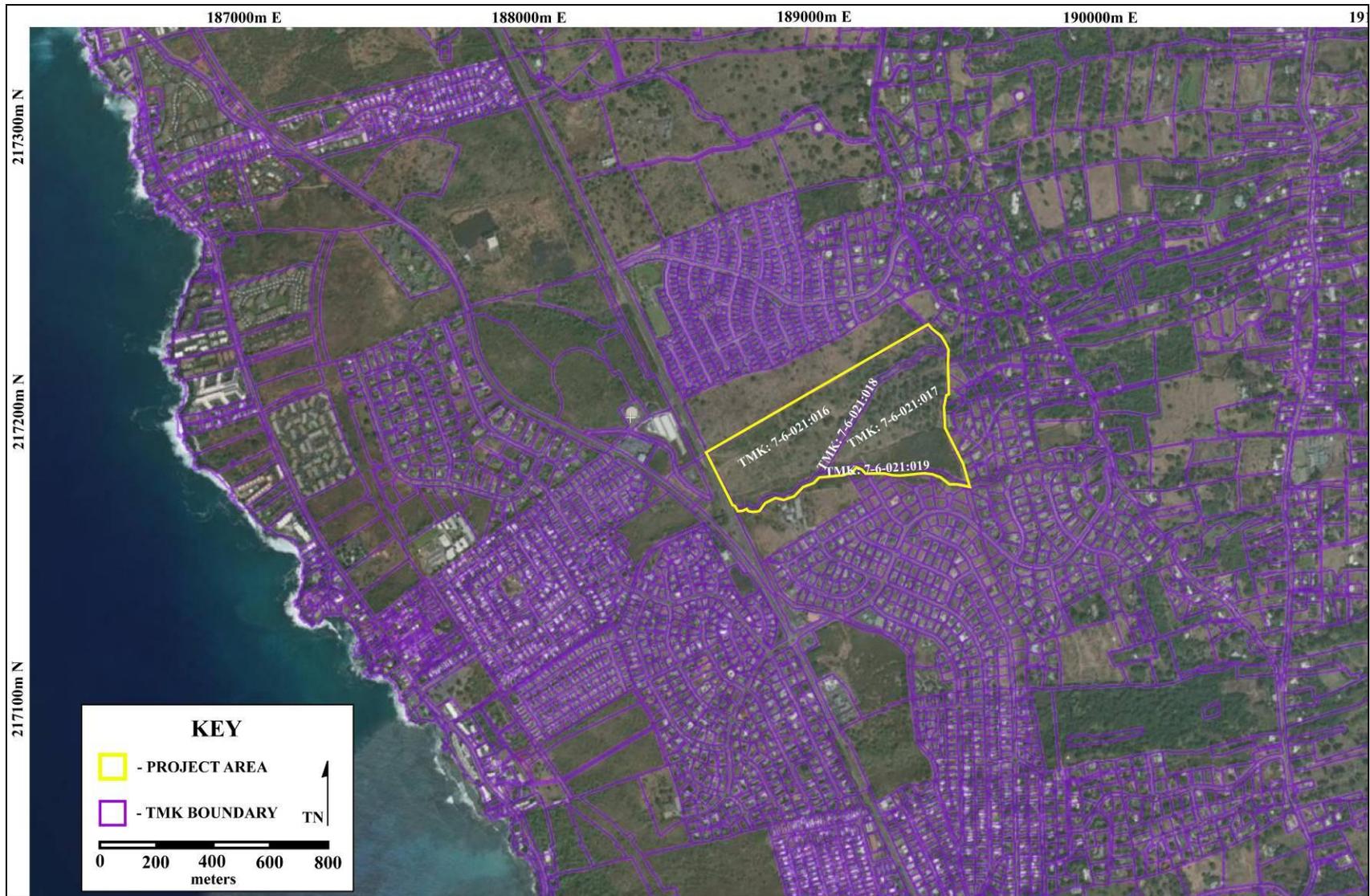


Figure 3: Aerial Photograph Showing Project Area, Hōlualoa, HI, Zone 5 North, 189445 m E, 2171790 m N. (ESRI, 2013 Image. Data Sources: Digital Globe, GeoEye, Earthstar, USDA, and USGS).

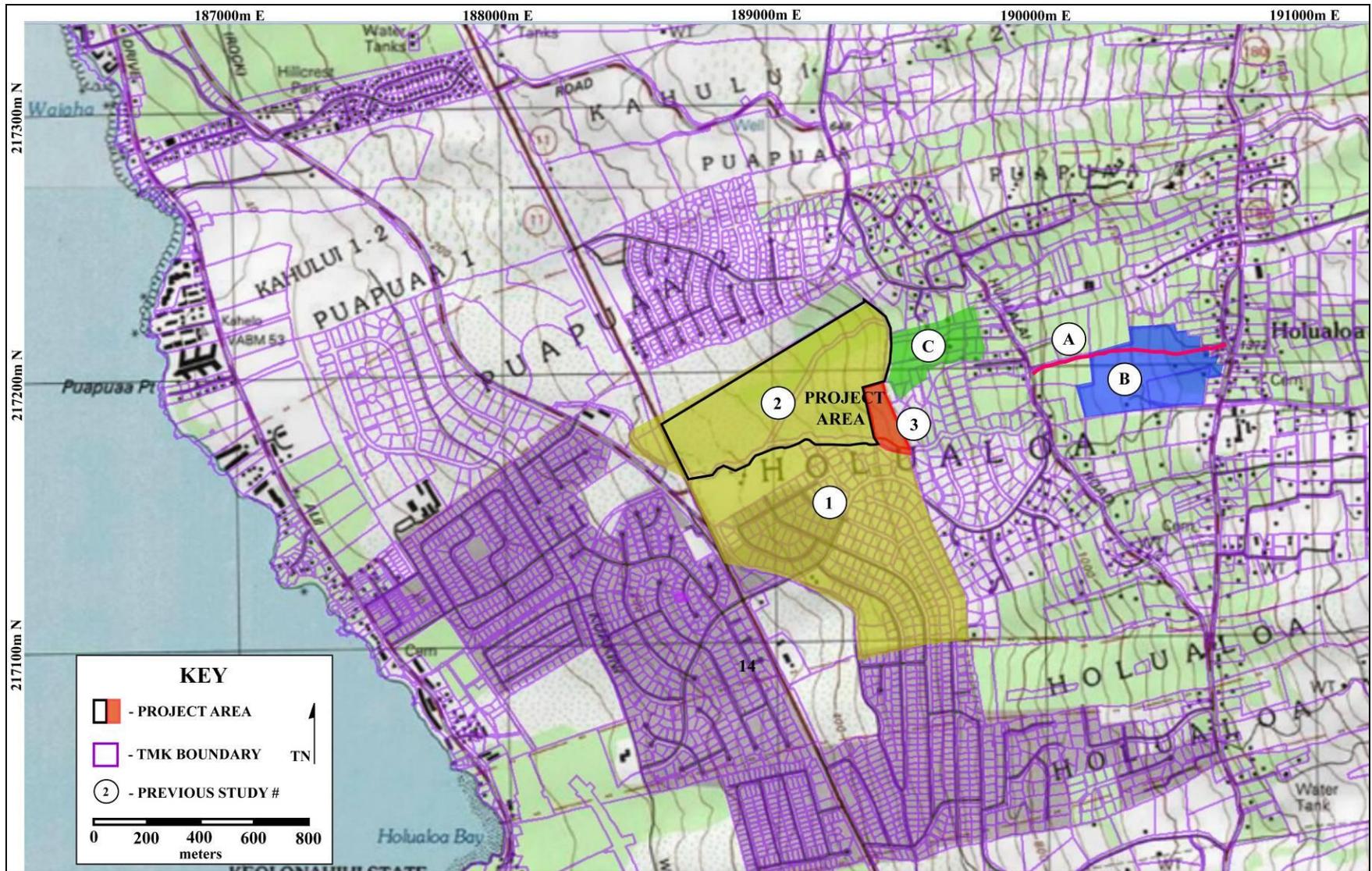


Figure 4: 7.5-Minute Series USGS Topographic Map Showing Location of Previous Archaeological Studies Discussed in this Letter Report and Project Area (Kealakekua Quad, ESRI, 2013. Data Sources: National Geographic Society, USGS).

At the request of the State Historic Preservation Division (SHPD), additional documentation of Sites 10011, 10012, 10031, 10049, recorded in the Hammatt et al. (1992) AIS report, was submitted to SHPD in a letter report (Hammatt and Shideler 2007). The Hammatt and Shideler (2007) letter report quoted the AIS recommendation that “all surface sites in the area were documented” in the AIS report and that “significant material from the study area has been recovered and that further investigation would be of minimum productivity” (Hammatt and Shideler 2007:11). However, the authors suggested that prior to future removal of the sites, they should be relocated to document their current condition and to document sites to prevailing SHPD AIS standards.

In a letter to the County of Hawai‘i Department of Planning dated July 30, 2018, (Log. No. 2018.00878 Doc. No. 2018.00878), SHPD requested a second AIS study of the Hammatt et al. (1992) project area to identify all archaeological historic properties present, and to update previous archaeological documentation to include site plans with site boundaries and areas impacted by bulldozing, photographs of all sites and features, an assessment of their integrity, and site significance.

SCS completed a second AIS study of 76.121 acres of the project area [TMK: (3) 7-6-021:016, 017 (por.), 018, and 019] (Escott and Escott 2020, see Figure 4 study #2) and submitted a draft AIS report to SHPD for review/approval. The report included all but 5.0 acres in the southeast corner of the DEA project area. The entire project area was subjected to a pedestrian survey. Seventeen of the twenty one previously identified archaeological sites were located (Figure 5). Two of the previously documented sites (Site 10020 and Site 10034) relocated by SCS are natural bedrock outcrops. One site, former burial Site 10012 contained burials that were reinterred off-project in 1993.

The four remaining previously documented sites (Sites 10017, 10033, 10049, and 10071) were bulldozed prior to the SCS fieldwork and the remains of the sites are no longer present on the ground surface. Three previously undocumented sites were also documented, including a portion of the railroad berm (Site 30592), a small coffee shed enclosure (Site 31181), and several ranch walls (Site 31182). There were no remains of a *hōlua* in the project area.

A third AIS (Escott and Escott 2018, see Figure 4 study #3) was conducted in the 5.0 acre southeast corner of the DEA project area [TMK: (3) 7-6-021:017 (por.)] that was not previously studied. The entire project area was subjected to a pedestrian survey and twenty two archaeological sites (Figure 6) were recorded, primarily agricultural complexes and terraces associated with pre-Contact era through early post-Contact era to Historic era agriculture. Several Historic era walls and enclosures, a lava tube burial, and a portion of the old railroad berm were also documented in the report. Preservation was recommended for the burial and the railroad berm. There were no remains of a *hōlua* in the project area.

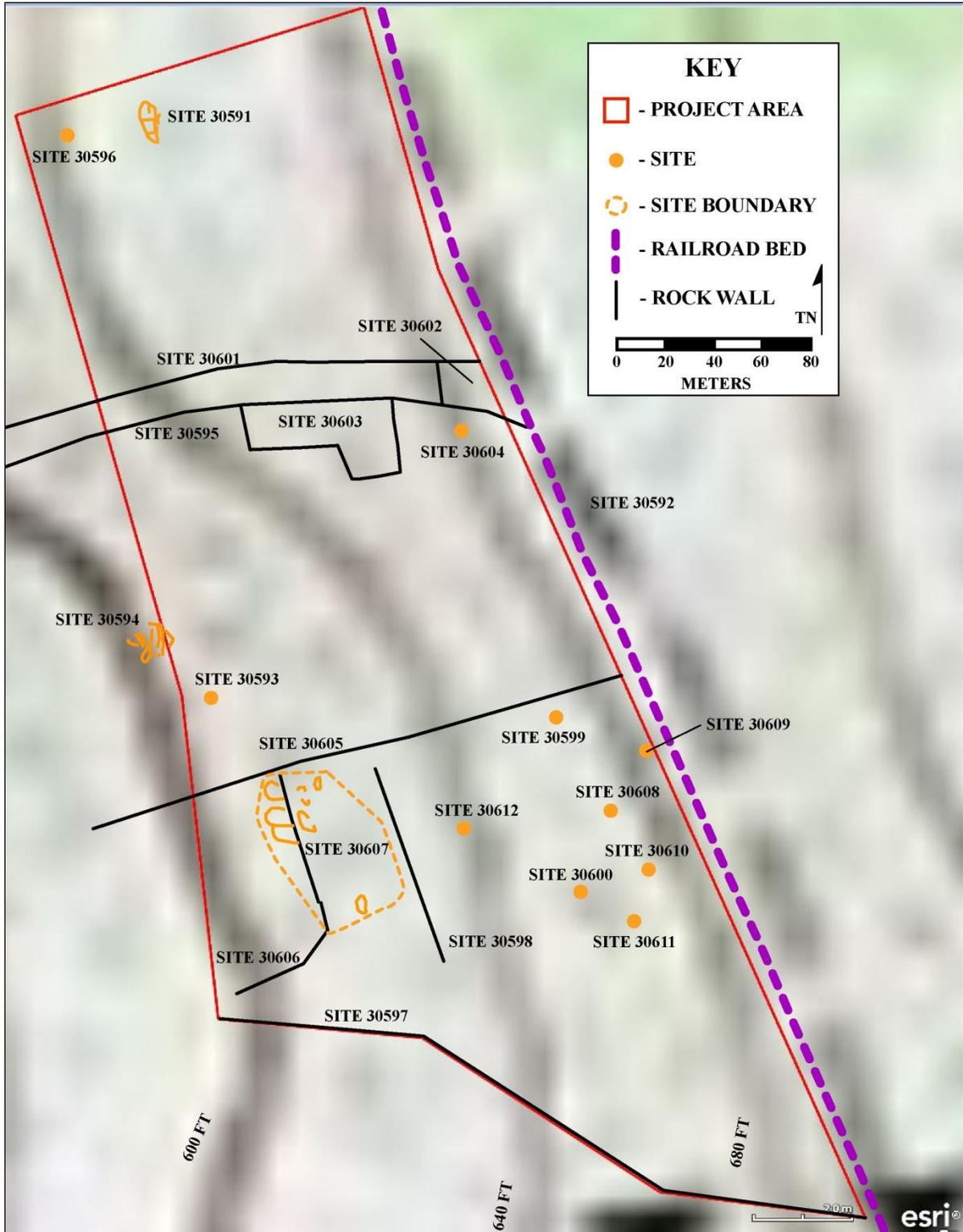


Figure 6: 7.5-Minute Series USGS Topographic Map Showing Locations of Project Area Archaeological Sites (ESRI, 2011. Sources: National Geographic Society, USGS. Kealakekua Quadrangle).

Evidence for a *He'ehōlua* Course (**Kahua Hōlua**)

A *he'ehōlua*, or *hōlua*, course (*kahua hōlua*) is a long, very straight course constructed on a slope by removing large rocks, paving the course with cobble and pebble sized rocks and then covering them with fresh dirt, grass, sticks, and/or reeds, and finally lubricating the surface of the course with grass steeped in *kukui* oil. The course was made very smooth and without bumps by this method of construction. The remains of *hōlua* courses on Hawai'i island appear as very straight smooth courses paved with cobbles and boulders. They range in width from 15 feet near the top, or starting position, to 60 feet in width further down the course.

The larger rock removed from the course often lined the edges of the course. In some areas where depressions in the ground surface existed, they were filled level with rock. In such cases, the outer edges of the stonework filling the depressions would appear as walls extending from the ground surface to the top surface of the *hōlua* course. High walls were not constructed along the edges of narrow *hōlua* courses as *papahōlua* (*hōlua* sled) riders often reached speeds of 50 to 60 miles per hour. The *hōlua* course was necessarily very straight and not lined with rock walls that would cause even more serious injury to riders if struck.

Evidence for a *he'ehōlua* course located in Hōlualoa 1st and 2nd Ahupua'a is based on the *ahupua'a* name Hōlualoa, translated as "long sled course" (Pukui *et al.* 1974:48), and by the Hōlualoa Inn's website stating there is a *hōlua* course on their property. Their website starts by stating "here in the village of Holualoa, the origin of the name comes from an actual holua slide that traverses downslope through the area, passing thorough our property at Holualoa Inn" (<https://www.holualoainn.com/history-of-the-holua-slide/>). Their map of the inn property labels the site as "D, Ancient Holualoa Trail" (Figure 7). It is unclear if the interpretation of the feature as a *hōlua* course is based on oral tradition or some other information. There is no documented oral history, archival documents or archaeological studies describing a *hōlua* in this location or in Hōlualoa 1st and 2nd Ahupua'a.

The one discussion of a possible *hōlua* in Hōlualoa 1st and 2nd Ahupua'a is included in an M.A. thesis by Thomas Keali'iahonui Stone (Pōhaku) (Stone 2002). Mr. Stone is an accomplished Hawaiian cultural practitioner specializing in *he'ehōlua*. The entirety of Mr. Stone's description of a possible *hōlua* located on the Hōlualoa Inn property follows. The italicized emphasis is mine.

...in the mountains above *Kailua, Kona* there are also the remnants of what was perhaps a great slide from which the area gets its name – *Hōlualoa*, or "the long *hōlua* slide". My investigation of this area found just a small portion of the slide, in an old coffee field behind the *Hōlualoa Lodge* [Hōlualoa Inn], located just below the store. ***No one today remembers the existence of the slide or any stories about it.*** From this location and from what we know about the length of the Keauhou slide (4,200 feet) I estimate



Figure 7: Hōlualoa Inn Map Showing Ancient Hōlualoa Trail.

this slide (in its time) may have been perhaps 6,000 feet or more in length, with a width ranging from about 10 feet (in the area of this particular segment) to varying widths throughout the slide. Because *there is no other segment* surviving it is difficult to determine whether the slide had a 60-foot width, as does the slide at *Keauhou*, or if it was narrower. *Of greater importance is that there are no contemporary records of its origin, time of use, or when it ceased to be used; I found however, that it was rumored to have existed, and this lead me to do a site inspection.* But, the oral history of the islands is extensive, and it may take some time to perhaps uncover a chant that actually records some information about this slide. [Stone 2002: 116-117]

Two AIS studies were conducted on the *hōlua*/trail site (Desilets and Rechtman 2004, see Figure 4 study A) and on the entire Hōlualoa Inn property (Rechtman 2013, see Figure 4 Study B). The former AIS study (Desilets and Rechtman 2004) conducted exclusively for the *hōlua*/trail feature determined that it is an Historic era road (Site #50-10-37-24211) based on the orientation and construction of the site; based on Historic era maps showing the historic road in this location; based on consultation with and concurrence by Na Ala Hele Trails Association; and based on a 2004 letter from the State of Hawai'i Attorney General Land/Transportation Division summarizing the history and legal ownership of the historic road. The Rechtman (2013) AIS report prepared for the entire Hōlualoa Inn property also did not identify any sites related to a *hōlua* course (Figure 8).

The Historic era road (Site 24211) was documented (Desilets and Rechtman 2004) between Māmalahoa Highway and Hualālai Road (Figure 9). The road orientation is not very straight and has a number of obtuse angle turns (Figure 10 through Figure 14). In addition, the ground surface is not sloped in places, does not have a surface of cobbles and pebbles, and is not smooth, as would be expected if the site were the remains of a *kahua hōlua* (Figure 15). The width of the road varied between 1.5 and 5.0 meter (5 feet to 16 feet 5 inches) with the majority of the trail width measuring 11.5 feet (Desilets and Rechtman 2004:14). The rock walls lining the road averaged 1.0 meter in height. The walls are bi-faced dry-stacked rock walls with cobble core fill in places. The wall construction is similar to Historic era rock walls constructed along Historic era roads, property boundaries, gardens, and cattle pastures.

The western terminus of Historic Road Site 24211 is at Hualālai Road, though, it might have continued west along a trail shown on a 1928 map (see Figure 9 and Figure 10). The western terminus of that trail is at a north/south trail approximately 300.0 m east of the DEA project area. There are two *mauka-makai* (east/west) trails that intersect the north/south trail (see Figure 9 and Figure 10). The southernmost trail passes south of the DEA project area. The northern trail terminates at the railroad berm along the eastern boundary of the DEA project area. The level railroad berm was also used as a route for north/south pedestrian travel.

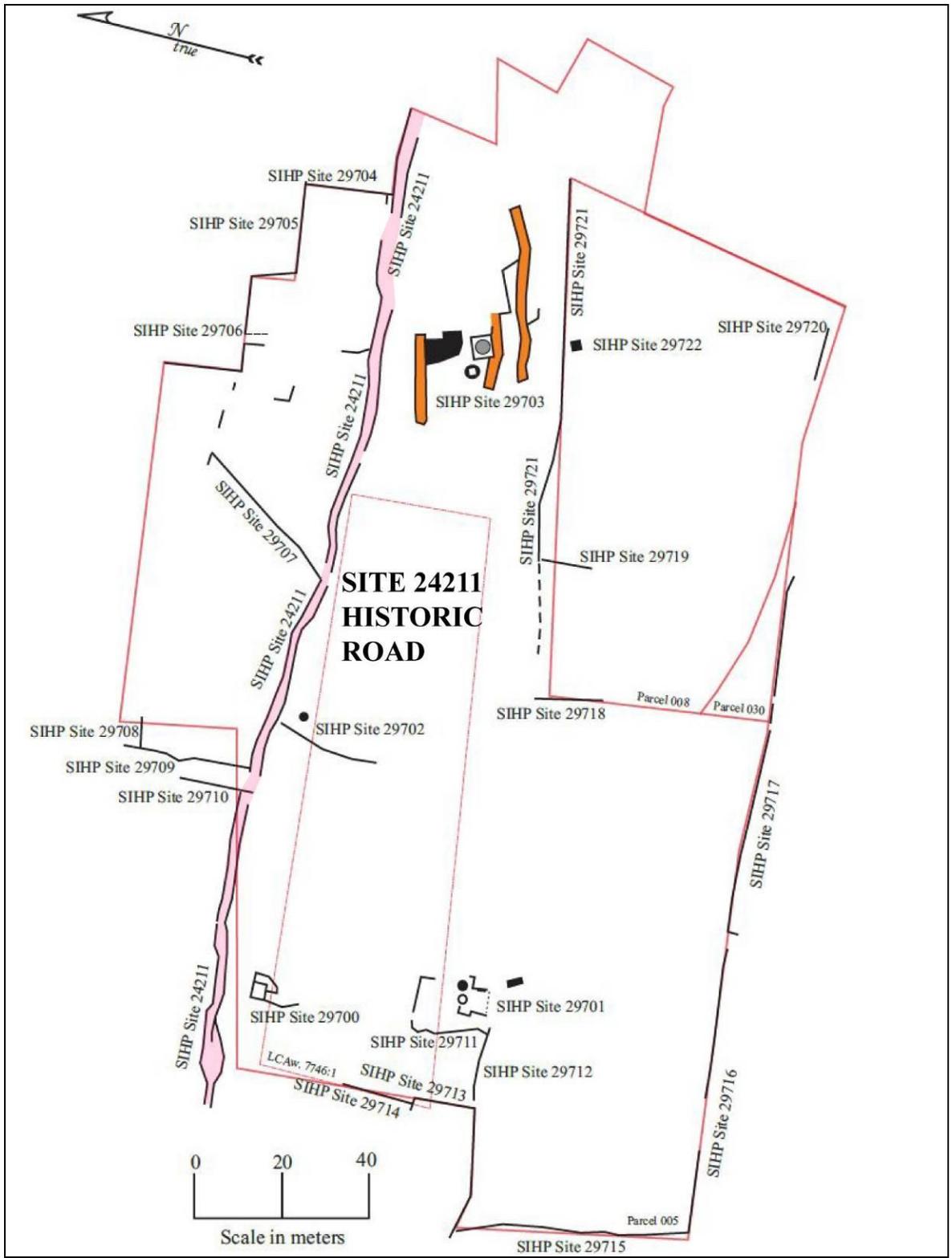


Figure 8: Hōlualoa Inn Property Map Showing Locations of Site 24211 Historic Road and Archaeological Sites Documented in the Rechtman (2013) AIS report (Rechtman 2013:23).

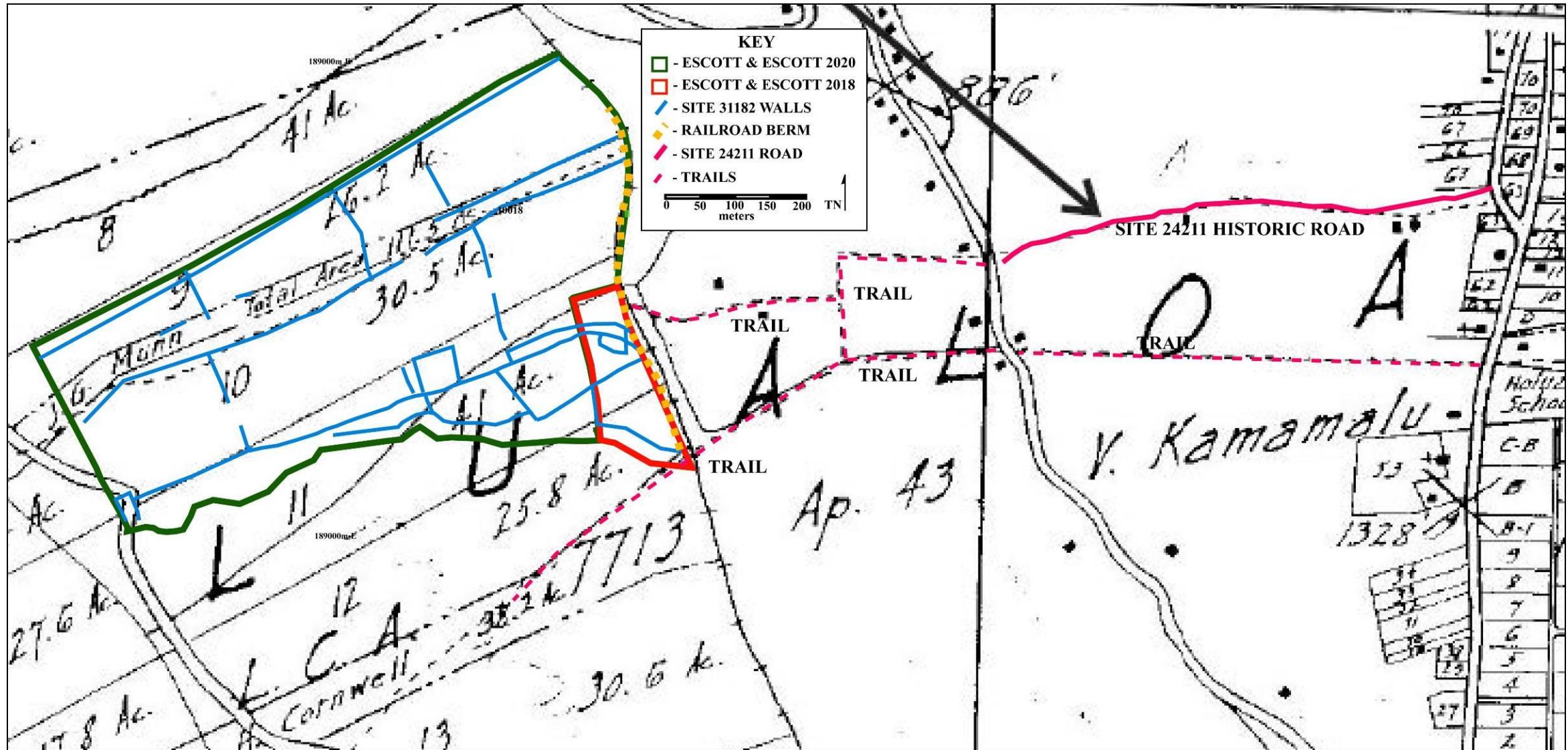


Figure 10: Portion of 1928 “Strip Map” Showing Location of Historic Road, Trails and Project Area (Adapted from Desilets and Rechtman 2004:9).

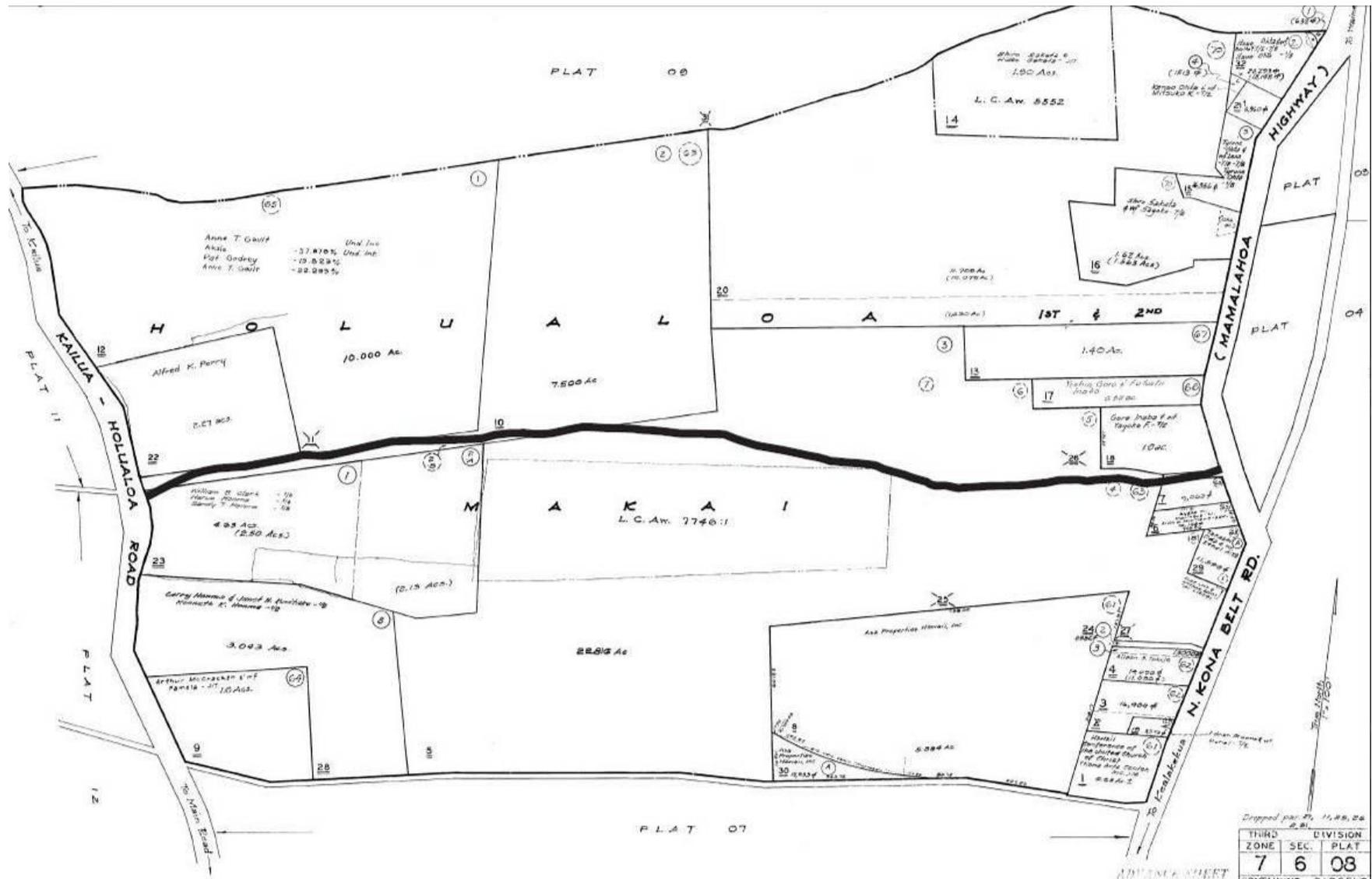


Figure 11: TMK: (3) 7-6-008 Map Showing Orientation of Site 24211 Historic Road (Heavy Black Line).

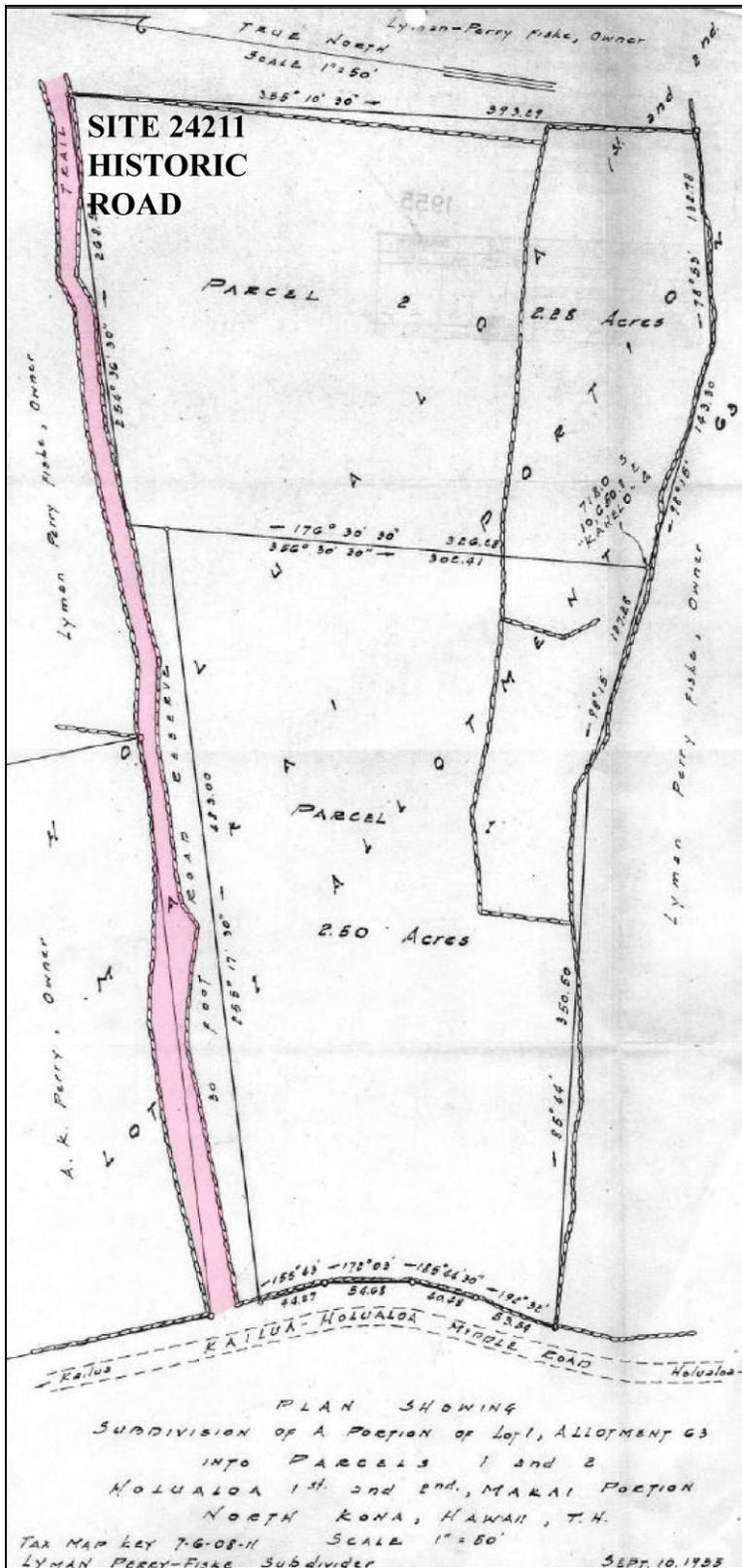


Figure 12: 1955 Survey Plan of Lower (Western) Portion of Site 24211 Historic Road and Kailua – Hōlualoa Middle Road (Hualālai Road).

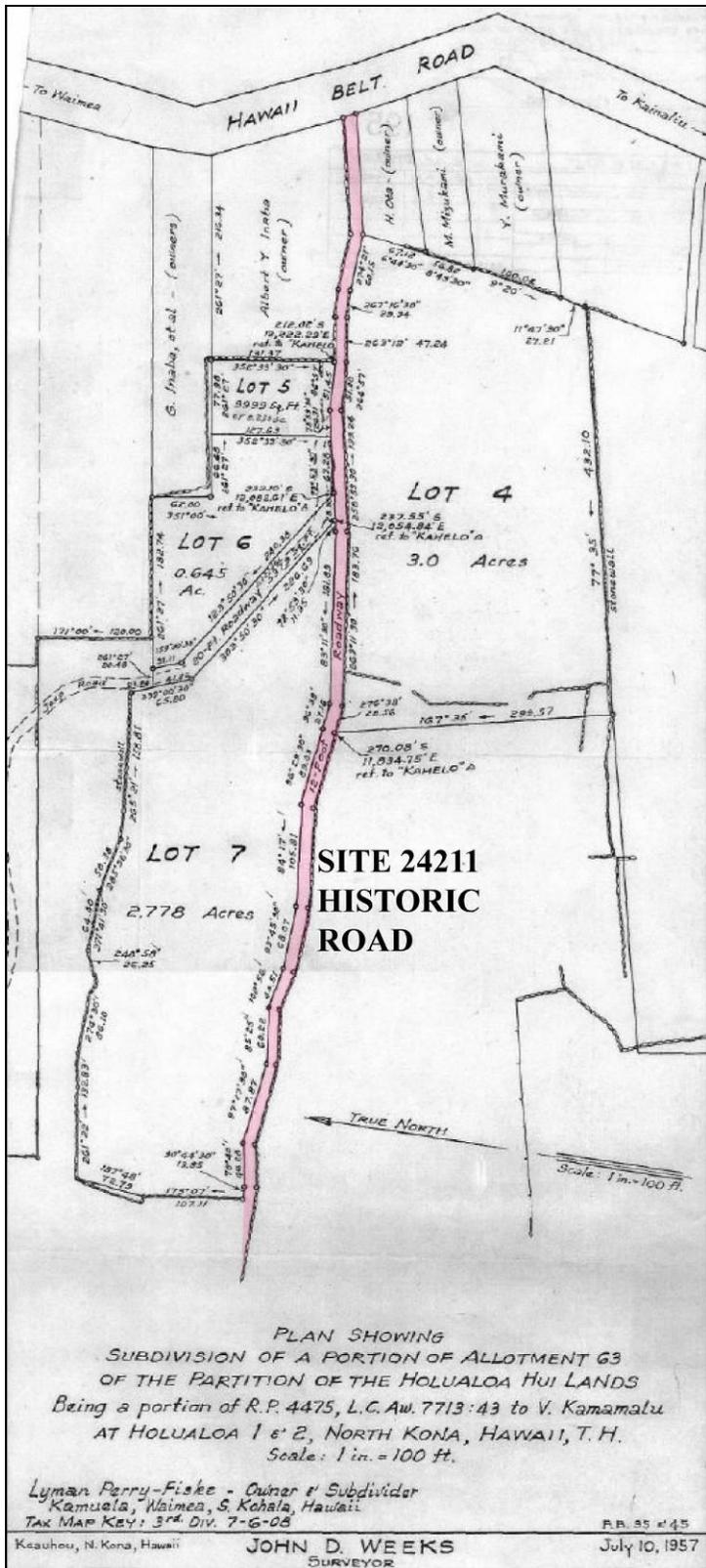


Figure 13: 1955 Survey Plan of Upper (Eastern) Portion of Site 24211 Historic Road and Hawai‘i Belt Road (Māmalahoa Highway).

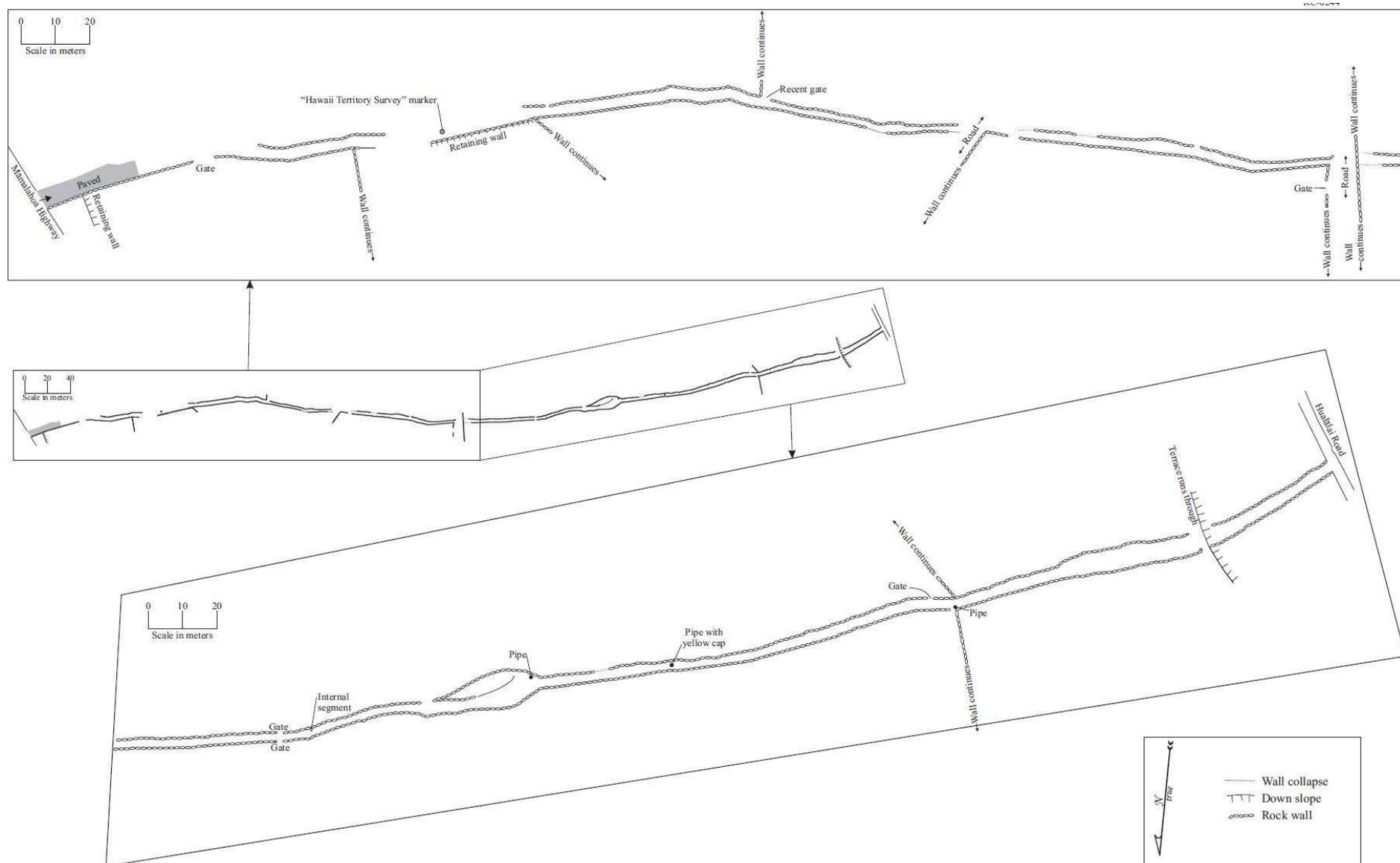


Figure 14: Site 24211 Historic Road Plan View Map (Desilets and Rechtman 2004:15).



Figure 15: Photograph of Site 24211 Historic Road and Rock Walls, Showing Uneven Ground Surface, Looking East (Rechtman 2013:24).

There are several walled gardens and corrals on the DEA project area, south of the trail terminus, that are not related to the trail (see Figure 6 and Figure 9). The eastern ends of parallel walls Site 30595 and Site 30601 are constructed onto the west side of the railroad berm indicating they were built and used after the construction of the railroad berm. The walls are stacked, bi-faced, and are cobble core filled in places, similar to Historic era walls documented in other places on the Island of Hawai‘i. There are also north/south cross walls that bisect the space between the parallel walls. Finally, the ground surface between the walls is uneven, stepped with natural geologically-formed level terraces, and is dotted with bedrock outcrops and loose boulders.

The only other parallel walls within the current DEA project area are Site 31182, Feature 2 and Feature 3 walls located in the northern and northeastern portions of the project area, respectively (see Figure 5 and Figure 9). These two walls are located along the boundary of Land Commission award (LCA) #3660 awarded to John G. Munn (Figure 16). The LCA awarded to Munn is also depicted in the Figure 10 1928 map. Site 31182 Feature 2 is the southern LCA boundary wall and Feature 3 is the northern LCA boundary wall. The western end of Feature 3 terminates on the north bank of a seasonal gulch and there is a gap in the Feature 2 wall at the same gulch. If the parallel walls bounded a *hōlua* course, the course would empty into a large gulch, which is an unlikely scenario.

The southern LCA property boundary wall (Feature 2) was also documented in an AIS report (Dirks et al. 2013) conducted within the property adjacent to the northeast boundary of the DEA project area (see Figure 4 study C). The Dirks et al. 2013 report documented 149 features associated with Historic era farming and the LCA boundary wall. There were no *hōlua* or trail sites identified during that study.

There are no surface features within the DEA project area that are associated with a *hōlua* or trail. The ground surface within the DEA project area is uneven, stepped with natural geologically-formed level terraces, and is dotted with bedrock outcrops and loose boulders. The surface remains of a *hōlua* would be substantial, consisting of a long and wide smooth prepared surface of cobbles and pebbles that would contrast with the uneven topography in the project area and would be very easy to identify. There are no such surface features within the DEA project area.

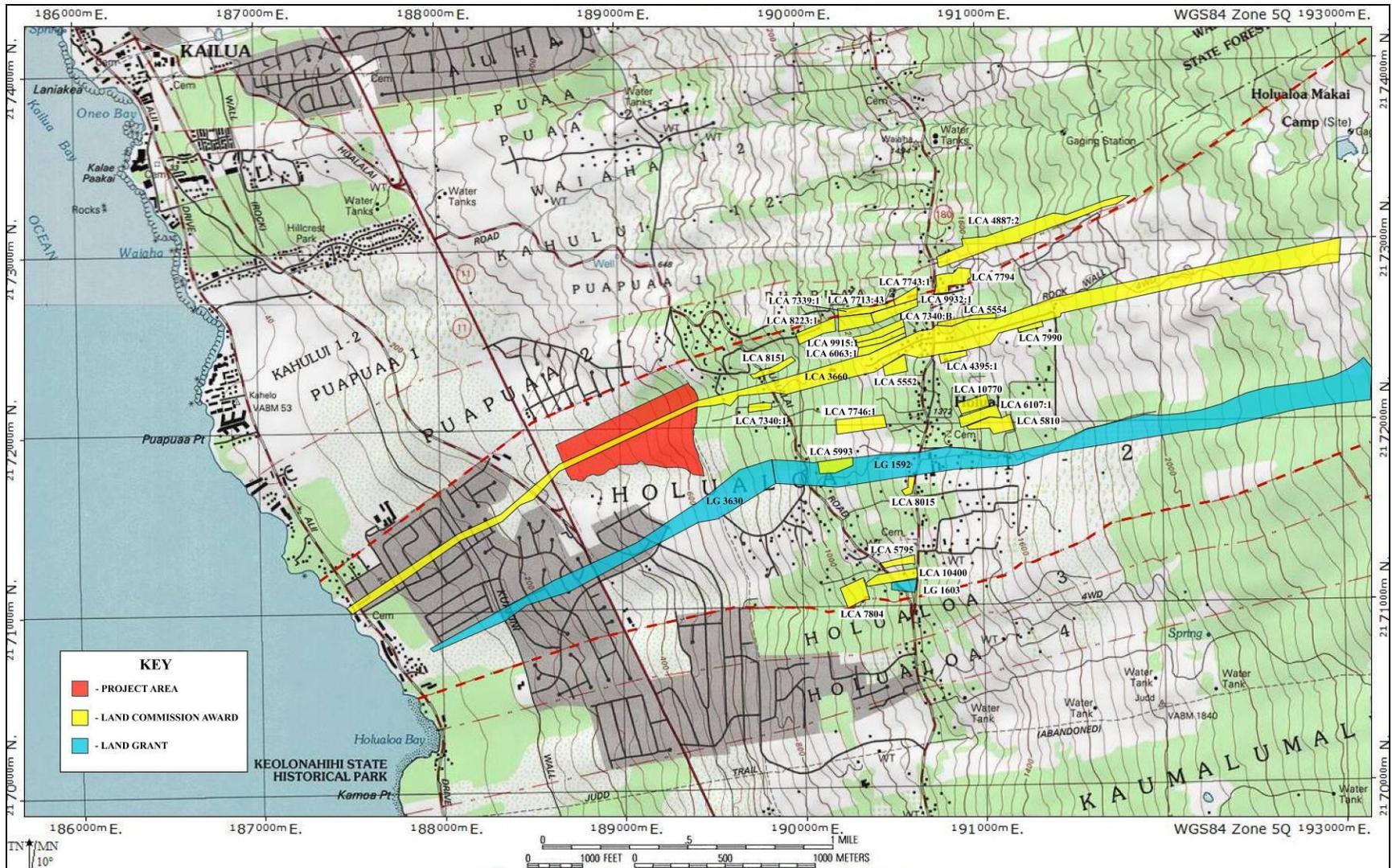


Figure 16: 7.5-Minute Series USGS Topographic Map Showing Location of Land Commission Awards, Land Grants, and the Project Area (National Geographic Topo!, 2003, Kealahou Quad. Data Sources: National Geographic Society, USGS).

Response to DEA Comments Asserting the Presence of a *Hōlua* within the Project Area

A number of Comments on Form Declaration, and other written comments (notably Attorney Strauss letter), submitted during the DEA process assert that north and northwest portions of the DEA project area contain features of a *hōlua* slide, including rock walls that were not identified or documented in the archaeological studies. It appears the respondents are referring to Site 31182 Feature 2 and Feature 3 walls which are LCA #3660 boundary walls.

One of the DEA respondents, John, a member of the Kona Vistas AOA Board, contacted Mr. Thomas Stone (Pōhaku) by email on July 1, 2019 to ask about the Hōlualoa *hōlua* course. The printed email chain provided by the respondent states the emails are communications between Tom Pōhaku Stone and a Kona Vista Board member but does not show the email address or full name of the correspondent John. In the email, John refers to “the portion of the holua at the Holua inn [that] has rock walls on both sides” and refers to parallel walls within the proposed development area, possibly Site 31182 Feature 2 and Feature 3 walls which are LCA #3660 boundary walls.

Primarily, Mr. Stone’s email responses provide accurate information concerning the cultural importance of the royal and religious complexes along the coast and within the near-coastal region between Kailua to the north and Keauhou to the south. The remains of many of these complexes were first mapped by Henry Kekahuna. Mr. Stone correctly states the religious and social importance of *he‘ehōlua* and its connection to the sacred and sociopolitical structures along the coast and in the near coastal region. However, the complexes are located more than 1.0 km west of the DEA project area and there are no remains of royal, sacred or sociopolitical complexes, or a *hōlua*, within the DEA project area. The existence of a *hōlua* within the DEA project area was asserted by DEA respondents, not by Mr. Stone. As discussed above, there is no documented oral history, archival documentation, or archaeological evidence to suggest a *hōlua* course existed within the DEA project area.

REFERENCES CITED

Desilets, M., and R. Rechtman

- 2004 *Archaeological Inventory Survey of a Grant Increment Road Remnant Property (TMK:3-7-6-08:005 por.), Hōlualoa 1-2 Ahupua‘a, North Kona District, Island of Hawai‘i.* Rechtman Consulting Report RC-0244 prepared for Curt A. Cottrell, Nā Ala Hele Program Manager, Honolulu, Hawai‘i and Ramon Perez de Ayala, Pua‘anui Partnership, Honolulu, Hawai‘i.

Dircks, A., L. Zenobi, and R. Rechtman

- 2013 *Archaeological Inventory Survey of the Proposed Miyose Farm Subdivision (TMKs:3-7-6-001:003, 009, and 019), Hōlualoa 1-2 Ahupua‘a, North Kona District, Island of Hawai‘i.* Rechtman Consulting Report RC-0856 prepared for Edward Rapoza, Kailua-Kona.

Escott. G., and S. Escott

- 2018 *Archaeological Inventory Survey Report for 5.0 Acres Located in Hōlualoa 1st Ahupua‘a, North Kona District, Hawai‘i Island, Hawai‘i [TMK: (3)7-6-021:017 Por.].* Prepared for Kona III, LLC. SCS Report 1871, Honolulu.
- 2020 *Archaeological Inventory Survey Report for 76.121 Acres Located in Hōlualoa 1st Ahupua‘a, North Kona District, Hawai‘i Island, Hawai‘i [TMK: (3)7-6-021:01-019.].* Prepared for Kona III, LLC. SCS Report 2330, Honolulu.

Hammatt, H.H., W.H. Folk, and D.W. Shideler

- 1992 *Archaeological Survey Testing and Excavation of a 174-Acre Parcel, Holualoa, North Kona, Hawai‘i.* Report prepared by Cultural Surveys Hawaii for the Gamlon Corporation. Report on file at the SHPD Library, Kapolei.

Hammatt, H.H., and D.W. Shideler

- 2007 *Letter Report Documenting Archaeological Study Conducted, Finds, and Their Treatment at a Proposed Multi-Family Residential Development, Holualoa Ahupua‘a, North Kona, Hawai‘i, TMK: (3) 7-6-021:016 (por.).* Report prepared by Cultural Surveys 1250 Oceanside Partners, LLC. Report on file at the SHPD Library, Kapolei.

Pukui, M.K., S. Elbert and E. Mookini

- 1974 *Place Names of Hawaii.* University of Hawaii Press. Honolulu.

Rechtman, R.

2013 *An Archaeological Inventory Survey of the Hōlualoa Inn Property, (TMKs: 3-7-6-08:005, 008, and 030), Hōlualoa 1-2 Ahupua‘a, North Kona District, Island of Hawai‘i.* Rechtman Consulting Report RC-0800. Prepared for Cassandra Hazen, Carmel, California.

Stone, T.

2002 *The Reinstitution of a Traditional Hawaiian Practice: A Native Perspective of Ritualism through the Performance of He‘ehōlua.* Thesis submitted to the graduate division of the University of Hawai‘i in partial fulfillment of the requirements for the degree of Master of Arts in Pacific Studies. Honolulu.