



APPENDIX F, A
Ka Pa‘akai Cultural Analysis



Waikapū Country Town Development

Ka Pa‘akai Cultural Analysis

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The proposed Waikapū Country Town intends to develop a new residential mixed-use community on lands within and around the Maui Tropical Plantation (MTP), which is adjacent to the existing small, historic town and ahupua‘a of Waikapū, Maui. According to the proposed development plans, the project will encompass approximately 503 acres of land to be used for urban and rural development. Approximately 1,073 acres will remain in agricultural use and about 800 acres of this agricultural land will be placed into an agricultural conservation easement. Waikapū Country Town must obtain approval from the State Land Use Commission (LUC) and County of Maui Planning Commission, and Maui County Council in order to proceed with their development plan.

Article XII, section 7 of Hawai‘i Constitution obligates the State of Hawai‘i and its agencies, such as the LUC, “to protect the reasonable exercise of customarily and traditionally exercised rights of Native Hawaiians to the extent feasible when granting permission for reclassification of district boundaries.” (*Ka Pa‘akai o Ka ‘Āina v Land Use Commission*, 94 Hawai‘i 31, 7 P.3d 1068 [2000]). Under Article XII, section 7, the State shall protect all rights, customarily and traditionally exercised for subsistence, cultural and religious purposes and possessed by ahupua‘a tenants who are descendants of Native Hawaiians who inhabited the Hawaiian Islands prior to 1778, subject to the right of the State to regulate such rights. In the context of land use permitting, these issues are commonly addressed when the LUC is asked to approve a petition for the reclassification of district boundaries, as such an action most often initiates activities that precede initial intensive development.

In the September 11, 2000 Hawai‘i Supreme Court landmark decision (*Ka Pa‘akai o Ka ‘Āina v Land Use Commission*), an analytical framework for addressing the preservation and protection of customary and traditional native practices specific to Hawaiian communities was created. The court decision established a three-part process relative to evaluating such potential impacts: first, to identify whether any valued cultural, historical, or natural resources are present; and identify the extent to which any traditional and customary Native Hawaiian rights are exercised; second, to identify the extent to which those resources and rights will be affected or impaired by the proposed action; and third, to specify the feasible action, if any, to be taken by the regulatory body to reasonably protect Native Hawaiian rights if they are found to exist.

In an effort to identify whether any valued cultural, historical, or natural resources are present within the proposed project area, and identify the extent to which any traditional and customary Native Hawaiian rights are, or have been, exercised (the first part of the analytical process); historical archival information was investigated, and prior and current cultural studies that included consultation and oral-historical interviews were reviewed. A summary of the analysis is presented below.

Waikapū is the first of four ahupua‘a (land divisions) in the moku (district) of Wailuku, poetically known as Nā Wai ‘Ehā (Waikapū, Wailuku, Waiehu, Waihe‘e). This land division is located within the southern portion of the West Maui Mountains named Mauna Kahālāwai (Ashdown 1971) and extends into the central isthmus named Ke Kula o Kama‘aoma‘o (Pukui 1983). The traditional palena ‘āina (boundaries) originate from the Hana‘ula Mountain Range (4,456 ft.). The boundary navigates northward through the Waikapū Valley and Stream onto Kapilau Ridge and eastward down Kalapaoka‘ilio Ridge located above a portion of the current Wailuku Heights subdivision. Continuing eastwards, appears a boundary known as Pōhāko‘i which was a large adze grinding stone near the current intersection of Ku‘ikahi Road and Honoapi‘ilani Highway. It subsequently moves east to a boundary point named Ka‘ōpala located near the Central Maui Baseyard. From there, the boundary moves southerly to Kīheipūko‘a near the once historical mo‘o pa‘akai (salt grounds) and current Keālia wetlands / fishpond. Moving westwards through Keālia and to Mā‘alaea Bay is a boundary point known as Kapoli, a famous spring adjacent to the current Mā‘alaea Boat Harbor. The palena ‘āina then veers north to a once famous cinder cone and now commercial dump called Pu‘uhele. The traditional boundary concludes when returning westward by means of four additional cinder cones named Pu‘uhona, Pu‘ulū‘au, Pu‘umoe, and Pu‘uanu, located on the Hana‘ula Mountain Range. (See Figure 1 for description)

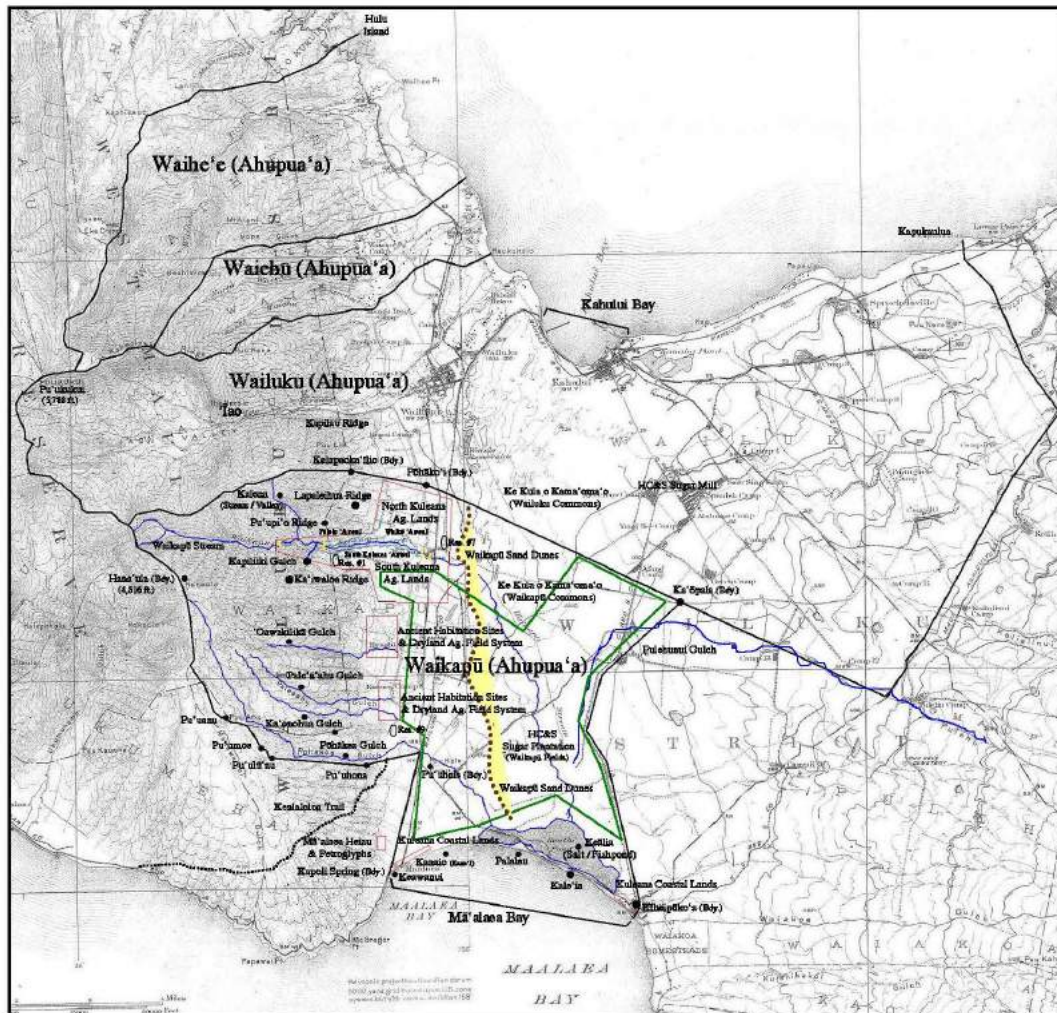


Figure 1. Copy of 2013 Palapala Hi‘onaina ‘Ōiwi o Waikapū - Cultural Landscape Map of Waikapū by Hōkūao Pellegrino.

One legendary account of Waikapū, as translated from the Hawaiian Language newspaper (Ka Nūpepa Kū'oko'a) by Elspeth Sterling and revised by Hōkūao Pellegrino, states that Waikapū received its name from a great conch which its sound used to be heard throughout the valley.

...The Waikapū now being discussed, is a legendary place named by some of the ancients, and has remained until this time. This place, Waikapū, has a cave away up the stream, the distance perhaps a mile or more from the village. On the southern side of the river, is a cave, and inside this cave is a pū, or conch...From this pū, the whole of the place was named Waikapū, Waters of the Conch... (Sterling 1998)

The land tenure during the time of the Māhele of 1848 indicated that Waikapū was a thriving ahupua'a in which Hawaiians dominated the cultural landscape by cultivating an extensive system of lo'i kalo (wetland taro patches) in and around Waikapū Valley and Stream. The coastal region of Waikapū was utilized for fishing grounds and salt production from Keālia wetlands/fishpond to Mā'alaea Bay. Maps from the late 1800s, demonstrate some 120+ Māhele land claims, both Land Commission Awards (LCAs) and Government Grants. The land mass of 'ili (subdivisions) where lo'i kalo were cultivated is estimated to be around 900 acres. Over 1,300 lo'i kalo were recorded in Land Commission Award claims and dispersed throughout the 900 acres. In addition to lo'i kalo claims, were requests for kula (dryland cultivation), mo'o pa'akai (salt pans/grounds), wauke (paper mulberry used for making kapa), hala (pandanus used for making mats), potatoes, and hale (house lots for living).

The interior portion of the Waikapū watershed existed an abundance of fresh water for the perennial waterway known as Waikapū Stream. Both stream and rich alluvial soils ensured high agricultural productivity and output by Native Hawaiians. Maps and records demonstrate that traditionally, Waikapū Stream was utilized to create 4 extensive 'auwai (irrigation systems), 3 on the north side and 1 on the south side of Waikapū Stream. These 'auwai were associated with irrigating the more than 1,300 lo'i kalo (wetland taro patches) documented in the Land Commission Awards and Government Grants. Waikapū Stream not only supported kalo which was the Hawaiians main dietary staple, but also mai'a (bananas), 'uala (sweet potatoes), kī (tī), and trees such as 'ulu (breadfruit) niu (coconuts), wauke (paper mulberry) and pūhala (pandanus). In addition, Waikapū Stream was the main freshwater source for Keālia, a fishpond, wetlands and estuary adjacent to Mā'alaea Bay. Habitation and religious structures, along with agricultural sites were likely distributed near lo'i kalo and down by the coast for marine exploitation, fish pond maintenance and the collection of salt produced in the mo'o pa'akai at Mā'alaea and Keālia. Water sources were equally important for those Hawaiians who established hale or habitation structures.

...Spreading north and South from the base of Waikapū to a considerable distance below the valley are the vestiges of extensive wet-taro plantings, now almost obliterated by sugar-cane cultivation; a few here and there are preserved in plantation camps and under house and garden sites along the roads. Among these gardens there were, in 1934, a few patches of dry Japanese taro. Far on the north side, just above the main road and at least half a mile below the entrance to the canyon, an extensive truck garden on old terrace ground showed the large area and the distance below and away from the valley that was anciently developed in terraced taro culture. On the south side there are likewise several sizable kuleanas

where, in 1934, old terraces were used for truck gardening. In the largest of these a few old patches were flooded and planted with Hawaiian taro, and there was some dry Japanese taro. Several terraces were used as ponds planted with lotus for their edible seed. There were probably once a few small terraces on the narrow level strip of the valley bottom in the lower canyon... (Handy and Handy 1972).

The proposed development project named Waikapū Country Town is located within the Waikapū ahupua‘a near the opening of the valley, stream and historic town of Waikapū. The developer’s land holdings comprise of 52 Land Commission Awards (LCAs) and Government Grants totaling 74 ‘āpana (parcels) that were claimed during period of the Māhele of 1848. The proposed project is situated on more than half of these claims. Of the 52 claims, 36 were compromised during the introduction of sugar cultivation and grazing by Waikapū and Wailuku Sugar Company. The remaining cultural properties are within the interior part of the Waikapū Valley and likely remain as they once were at the time of the Māhele. Some of these properties and cultural sites are still in use. Waikapū Country Town Development will be situated on the 36 Māhele land claims that were impacted by sugar cultivation and along intact kuleana lands currently being cultivated for lo‘i kalo.

Previous archaeological studies along with the history of land use at the time of the Māhele of 1848 and in-depth ethno-historic accounts, can be used to develop a general predictive model for traditional Hawaiian settlement and subsistence patterns for the Waikapū Country Town planned development. The region in and around the proposed project area appears to have been part of an extensive system of lo‘i kalo (wetland taro) production and pre-western habitation.

A hypothetical model for traditional Hawaiian settlement was developed by Kirch (1985) and Cordy (1978). According to this postulation, the project area would have been an ideal setting for early Hawaiian permanent habitation and agriculture. Utilizing dates from other Hawaiian Islands, Cordy postulated that initial pre-Contact settlement in lower valleys and coastal regions occurred from 300 to 600 A.D. and by 1000 A.D. fishponds, protected bays, and religious structures.

There have been numerous archaeological surveys and studies in Waikapū beginning in 1909 by Thomas Thrum, followed by J.F.G. Stokes and Kenneth P. Emory in 1920. More recently, there have been studies of pre-western contact settlement, agriculture, and other cultural sites by Folk and Hammatt, Kennedy, and Brisbin. None of these studies until recently however, were conducted on the land that is being proposed for the development of Waikapū Country Town.

An archaeological inventory survey (AIS) was conducted for the proposed Waikapū Country Town development by Archaeological Services Hawai‘i LLC. Of the 1,576 acres of land in which the developer consists of, the planned development will have a footprint of 503 acres of the total land base of 1,576 acres. The project area extends all the way to the southern edge of the Waikapū Stream, however the development will remain at least 100 ft. from the stream, such that the former cane access road which parallels the stream, as well as the steep to moderate slopes down to the stream’s edge will not be encroached upon by development. This 100 ft. buffer zone was mandated in 1992 by the State Land Use District Boundary Review for Maui, Molokai, Lanai, Honolulu where a 100-ft corridor on both sides of Waikapū Stream was placed into a Conservation District (Office of State Planning: 31). Developing a cultural reserve or corridor is one such mitigation

measure that has been proposed in the latter part of this study as a way to ensure protection of these cultural sites in perpetuity.

The AIS scope of work consisted of dividing the project area into five zones based primarily on the current TMK's (ASH 2013). From mauka to makai the zones are as follows: Parcel 3 Mauka, constitutes the mauka section of TMK 3-6-004:003; Parcel 3 Waena is the middle and remaining section of TMK 3-6-004:003; Parcel 6 is TMK 3-6-004:006; Parcel 7 is the current Maui Tropical Plantation landholdings 3-6-004:007 and Parcel 3 Makai is within TMK 3-6-002:003. The investigation was conducted to determine presence/absence, extent, and significance of historic properties within the proposed development area and to formulate future mitigation measures for these remains and the project area.

Due to the extensive grading and tilling activities associated with Waikapū and Wailuku Sugarcane Company cultivation and the construction of the Maui Tropical Plantation commercial buildings and agro-tourism facilities, no surface structural remains associated with the pre-Contact and post Contact periods were evident; however features associated with sugarcane cultivation was frequently found. Remnant subsurface historic properties such as rock alignments, buried cultural deposits, pits and human burials were not found in the over 150 trenches that were dug. The likelihood of encountering subsurface features throughout the actual development, was dependent upon the depth of the sugarcane till zone. Majority of the project area has undergone compounded surficial disturbances from commercial and small scale agricultural and animal husbandry pursuits providing little evidence of surface historic properties. This area was however intensively settled from the pre-contact period through the historic era as evidenced by the numerous kuleana land records via Land Commission Awards (LCAs), several large Government Grant lots, coupled with archival research and prior archaeological studies around the project area. Due to these alterations across the project area, the AIS procedures consisted of a pedestrian survey and subsurface investigations through mechanical excavations.

There were numerous features and historic properties found, most of which were associated with the plantation era, such as the Waihe'e Ditch (circa 1907) and a plantation ditch deriving from Reservoir #1. In addition was a traditional 'auwai which continues to flow and feed kuleana lands and lo'i kalo adjacent to the planned development. Lastly, there was an L-shaped retaining wall adjacent to the 'auwai that was likely part of a lo'i kalo complex.

Because of the numerous amount of former LCA's and Grants, as well as historic properties found within the proposed project area, the AIS recommended there be archaeological monitoring of Parcel 3 Mauka and Waena. Furthermore, the conducting of spot monitoring inspections of other localities not expressed in above analysis was recommended. Parcels 6 and 7 contain numerous LCA's and Grants; thus monitoring should initially be full time until the nature of the subsurface conditions in relationship to the proposed ground-altering activities is determined. Similarly for Parcel 3 Makai, monitoring should initially be full-time with the primary focus along the eastern and western perimeters, which are close to Wai'ale and East Waikō Roads, areas known and documented in Government Grant 2747 to Eugene Bal which contain sand dune burials. Prior to the commencement of construction, an Archaeological Monitoring Plan (AMP) detailing the localities to undergo monitoring procedures will be prepared and submitted to SHPD for review and approval.

A comprehensive Cultural Impact Assessment was developed for the proposed development and clearly outlined specific traditional Hawaiian practices and access rights found within the project area. The CIA formalized a collective review of prior cultural, archaeological and ethno-historical studies related to the Waikapū ahupua‘a, along with a wide range of interviews with living kama‘āina and lineal descendants of Waikapū. It seems that both historical and current traditional Hawaiian practices have not differed over time. What has changed however, is the extent for which these Hawaiian cultural practices are occurring. What once was a vast cultural landscape within the Waikapū, has diminished drastically due to the alterations of the land and natural resources caused by plantation era activities. Despite a fragmented cultural landscape, evidence of cultural Hawaiian practices occurring within and directly adjacent to the project area continues to exist.

The following valued cultural, historical and natural resources are currently being utilized for cultural Hawaiian practices; Access and utilization of Waikapū Stream, access to water via ‘auwai systems for traditional lo‘i kalo cultivation on kuleana lands, access to the interior part of the Waikapū Valley and watershed for gathering endemic and native medicinal plants as well as other Hawaiian food crops, native forest and habitat restoration, archaeological stabilization and cultural resource management of kuleana lands, and access to privately owned kuleana lands. The following paragraphs will address specific details regarding the above cultural Hawaiian practices by 1) Extent to which those resources including traditional and customary native Hawaiian rights will be affected or impaired by the proposed development. 2) Feasible action, if any, to be taken by the LUC to reasonably protect native Hawaiian right if they are found to exist.

The Waikapū Stream has and continues to be a very important cultural resource for Native Hawaiian cultural practitioners and practices such as lo‘i kalo cultivation. The proposed project area includes a plantation era irrigation and traditional ‘auwai system that provides water for South Waikapū kuleana lo‘i kalo farmers. An ancient ‘auwai historically provided water for South Waikapū kuleana lo‘i kalo farmers which commenced on Government Grant 1844 to Joseph Sylva, now currently part of the proposed project area. The use of the po‘owai or intake portion of this ‘auwai was discontinued when Wailuku Sugar Co. built the south Waikapū dam intake within the Waikapū Valley around the turn of the 20th century. Currently, the south Waikapū dam and intake is owned by Wailuku Water Co. whom divert Waikapū Stream water about 2 miles into the Waikapū Valley, delivers water through their ditch system and into Reservoir #1 which is on the developer’s proposed projects land. From Reservoir #1, a portion of water is released via a pvc pipe into a smaller open ditch and connects with the remaining portion of the ancient ‘auwai that delivers water to the south kuleana lo‘i kalo farmers. As of December 2016, 6 south kuleana land owners have been identified as utilizing this ditch commonly called south Waikapū kuleana ‘auwai for kalo cultivation: (TMK 3-6-005:019, TMK 3-6-006:027, TMK 3-6-006:025, TMK 3-6-006:029, TMK 3-6-006:003, TMK 3-6-006:013). There are numerous other south kuleana lands that are privately owned and consist of former lo‘i kalo terraces, however are not in use. Lineal descendants of these lands through the State Water Use Permit process have expressed interest in utilizing or returning to their ancestral lands to restore and farm lo‘i kalo. These lands are identified as (TMK 3-6-005:014, TMK 3-6-005:067, TMK 3-6-005:001, TMK 3-6-006:017, TMK 3-6-006:032, TMK 3-6-006:033, TMK 3-6-006:001, TMK 3-6-005:068, TMK 3-6-007:010).

To ensure that current and future Native Hawaiian practices associated with access to kuleana water for lo‘i kalo cultivation are protected, the following information has been provided by existing south kuleana lo‘i kalo farmers. They expressed that the irrigation system which provides water to their lands via the plantation ditch found within the proposed project area, is inefficient and causes limitations. The limitations include lack of and consistent water for lo‘i kalo cultivation as well as warm water that comes from Reservoir #1 rather than straight from the stream as it historically did. They have shared that the water entering the ditch comes from a reservoir which causes some warming of the water rather than fresh stream water directly from the Waikapū Stream. Although the amount of water released via a pvc pipe may be sufficient, the estimated 1 mile long open ditch has numerous leaks and along with absorption into the ground along the ironwood trees. When the water finally enters the ancient ‘auwai system near the kuleana lands, it has been said that the amount is minimal and does not provide sufficient amount of water for the current and growing needs of existing kuleana lo‘i kalo farmers.

The proposed project area has identified the plantation era irrigation and ‘auwai system be located within a greenway. Although the development will not adversely Hawaiian cultural practices related to lo‘i kalo cultivation on neighboring properties that access water via the developer’s land, a proposed improvement of the infrastructure and overall system should be implemented to mitigate their concerns. Kuleana lo‘i kalo farmers who are Native Hawaiian would like the developer to allow a direct in-flow from the diversion ditch prior to entering Reservoir #1. In addition, the plantation era open ditch along the ironwood tree line, should be enclosed with a large pipe to minimize water loss prior to entering the traditional ‘auwai. This they believe will which ensure the protection of existing and future access rights to this important cultural and natural resource. Prior to any work, it would be advised that the developer of the proposed project consult with neighboring south kuleana lo‘i kalo farmers to ensure that infrastructure improvements has minimal to no adverse effects to their traditional and customary rights and practices.

Traditional and customary rights in relationship to Waikapū water and lo‘i kalo cultivation are also occurring extensively on the north side of Waikapū Stream on kuleana lands directly across from the proposed project area. (TMK An intact traditional ‘auwai known as the north kuleana ‘auwai accesses Waikapū Stream water directly from the Waikapū Stream. (TMK 3-5-012:031, TMK 3-5-012:028, TMK 3-5-012:041, TMK 3-5-012:027, TMK 3-5-012:026, TMK 3-5-012:049, TMK 3-5-012:048, TMK 3-5-012:047, TMK 3-5-012:023, TMK 3-5-012:021, TMK 3-5-012:020, TMK 3-5-004:028, TMK 3-5-004:32, TMK 3-5-012:016, TMK 3-5-012:016, TMK 3-5-012:015, TMK 3-5-012:10, TMK 3-5-012:012, TMK 3-5-012:013, TMK 3-5-012:009, TMK 3-5-012:008, TMK 3-5-012:007, TMK 3-5-012:006, TMK 3-5-012:005, TMK 3-5-012:003, TMK 3-5-012:001) The State Commission on Water Resource Management set the Interim Instream Flow Standards (IIFS) for Waikapū Stream as 2.9 mgd in 2014 through a settlement agreement between the following parties; Hui o Nā Wai ‘Ehā, Wailuku Water Company, Hawaiian Commercial Sugar Company, Maui Tomorrow, County of Maui, and Office of Hawaiian Affairs. The amount of water that has been released into Waikapū Stream does not account for traditional and customary rights for kuleana lo‘i kalo farmers which is a protected right under State Law. Currently, Waikapū Properties who owns the land for the proposed project has a delivery purchase agreement from Wailuku Water Company for diverted Waikapū Stream water to be used for commercial agricultural and agro-tourism activities. The amount of water being utilized has directly impacted traditional and customary rights and practices for kuleana lo‘i kalo farmers on the north side of the

Waikapū Stream. The amount of water in the stream remaining in the Waikapū Stream is insufficient and does not satisfy the current and future use of kuleana lo‘i kalo farmers on the north side of the Waikapū Stream. Waikapū Properties however, has consulted with north kuleana users and has provided a clear mitigation plan stating that they will end all surface water use from Waikapū Stream except for cattle water troughs (250 gal/acre). Waikapū Properties commercial ag activities will be transitioning throughout 2017 to relocate to lands that will be irrigated via Waihe‘e Ditch and agricultural wells developed on the proposed project area. There is currently an ongoing contested case through the State Water Commission for issuance of Water Use Permits as well as revising the Interim Instream Flow Standards for Waikapū Stream.

The interior valley of Waikapū watershed includes a diverse native forest with an array of endemic plants, insects, snails and mammals. Traditional access and trails into the Waikapū Valley are along the Waikapū Stream which is partially owned by the developer of the proposed project. In addition to the river, are two plantation era access points adjacent to Reservoir #1. There are a number of Hawaiian cultural practices identified in relationship to accessing the Waikapū Valley for gathering and stewarding highly sensitive cultural and natural resources.

There are endemic medicinal plants such as ko‘oko‘olau (*bidens* sp.) and māmakī (*pipturus albidus*) that have been identified by lineal descendants of Waikapū for gathering and use in lā‘au lapa‘au (Hawaiian herbal medicine). These native plants and others grow in very specific regions within the valley and ridges. A Hawaiian family shared about a specific ko‘oko‘olau plant that they would gather fresh leaves from which was located along a ridge and dry gulch in the valley named Kapiliiki. The leaves were used to treat a family member who has high blood pressure. The proposed project does not adversely impact the area in which traditional cultural practice of gathering herbs exist. The proposed project will continue to allow access to the Waikapū Valley for traditional and customary practices through a greenway or potential cultural reserve adjacent to the Waikapū Stream and near the opening of the valley on a trail below Reservoir #1.

Lineal descendants of Waikapū have also been identified as having scattered the ashes of their ancestors within the valley. The cultural practices conducted by lineal descendants are reliant on access through the proposed development in order to honor their kūpuna. The proposed project will continue to allow access to the Waikapū Valley for traditional and customary practices through a greenway or potential cultural reserve adjacent to the Waikapū Stream and near the opening of the valley on a trail below Reservoir #1.

Hui Mālama o Waikapū, a non-profit organization affiliated with Tri-Is RC&D was established in 2009 and currently has a 15 year lease with the developer for a 5 acre parcel of land adjacent to the proposed project. The mission of the organization is “E mālama a ho‘okā‘oi i ka mo‘omeheu, kaiameaola kūlohelohe a me ka wai o kō Waikapu ahupua‘a” or “To preserve and enhance the cultural, biological, and water resources of the Waikapū ahupua‘a”. Hui Mālama o Waikapū is comprised of four Waikapū residents who have genealogical ties to the ahupua‘a and have committed themselves to protecting the culturally and environmentally rich landscape through cultural practices. The members of Hui Mālama o Waikapū (HMOK) who are also lineal descendants conduct cultural practices on the leased parcel of land in addition to lands in and around the project area. These practices include gathering of seeds and cuttings of endemic plant cultivars for propagation and restoration of the leased native dryland forest owned by the

developer. They also gather native plants and material for traditional implements used during activities on the leased land such as lo‘i kalo, Hawaiian food crop cultivation and lā‘au lapa‘au. In addition, the group has sought and received funding to initiate a natural and cultural resource management and education program in the leased area. Access and protection to this highly sensitive cultural sight is critical for both cultural practices and educational program implementation. Hui Mālama has brought over 1,000 students since their inception and continue to grow their educational programs to include formal partnerships with educational institutions on Maui. Currently the land owner provides access via an old plantation road leading up to the reservoir and access point to HMOW leased lands. The proposed project will continue to allow access to their lease lands for traditional and customary Hawaiian practices through a greenway or potential cultural reserve adjacent to the Waikapū Stream and near the opening of the valley on a trail below Reservoir #1. The founders and members of Hui Mālama o Waikapū and who are from the Waikapū ahupua‘a, have extensive knowledge of the cultural sites and practices within and adjacent to the proposed development project. HMOK has recommended that a cultural preserve be established to ensure that all cultural sites, existing and future cultural practices within the developers land base be protected in perpetuity. These sites include kuleana lands with lo‘i kalo terraces, ‘auwai systems, house sites, other cultural and archaeological features, and native plant species. Hui Mālama o Waikapū proposes to work alongside developer to ensure that there is a plan to mitigate any potential adverse impacts on these highly sensitive cultural lands.

Through the development of the CIA, two privately owned kuleana parcels of land were identified. They are called the “Mahi parcels”. Both parcels are located directly in the middle of where the proposed urban lots were to be developed in the mauka section. These parcels are currently vacant and in the middle of a pasture used by the developer and neighboring land owner for grazing cattle. Lineal descendants of the Mahi family who now live on O‘ahu, were contacted through this process and expressed a deep interest in returning to their ancestral land someday along with a permanent access easement to their property. The developer for the project has been made aware of this and has since moved the urban lots and road away from the Mahi kuleana parcels. In addition to the Mahi family, are also the Kauihou family who have genealogical ties to Waikapū. Their kuleana lands are adjacent to the Waikapū Stream and along a flat joined by the proposed project. Access to both the Kauihou and Mahi parcels are through the proposed project area. Mitigation measures to ensure access by the developer has been taken to minimize any potential impacts. A permanent easement for these families is recommended to ensure that both Native Hawaiian families are able to exercise any traditional practices in the future.

Given the cultural-historical, archaeological and Hawaiian land tenure background presented above, combined with cultural/oral historical studies conducted during the CIA, it is the finding of the current analysis that there are specific valued cultural, historical and natural resources present and traditional and customary Native Hawaiian rights being exercised within the proposed Waikapū Country Town development. The Ka Pa‘akai Cultural Analysis addresses specific mitigation measures to ensure that there are minimal to no adverse effects on any of the cultural practices identified within the CIA. It is further recommended that the Hawai‘i Land Use Commission follow up with the applicant to ensure that Native Hawaiian rights and practices are preserved and that mitigation measures are formalized prior to securing their entitlements.

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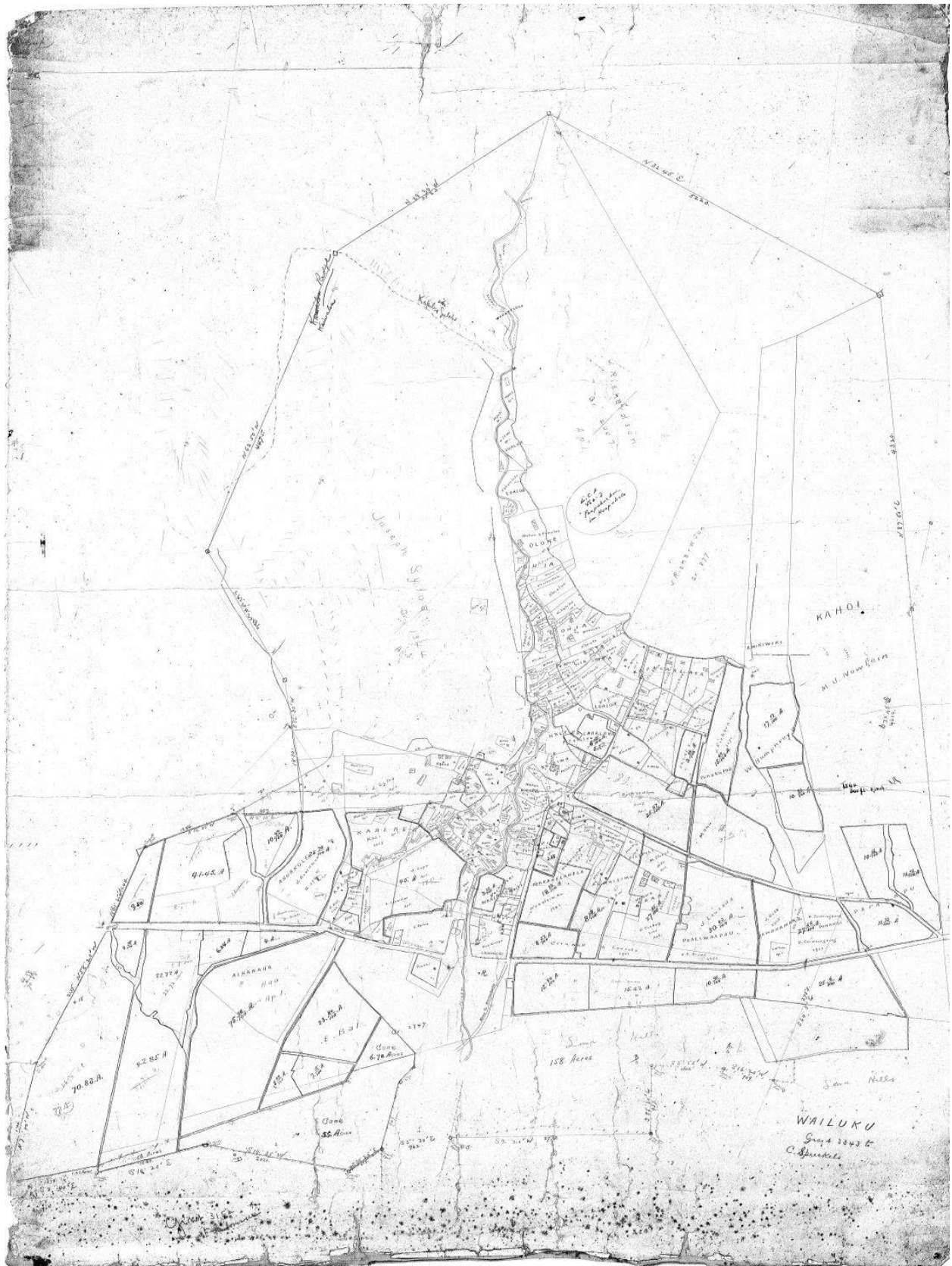


Figure 2. Copy of 1884 Map of Waikapū by M.D. Monsarrat, depicting extensive kuleana lands associated with LCAs and Government Grants.

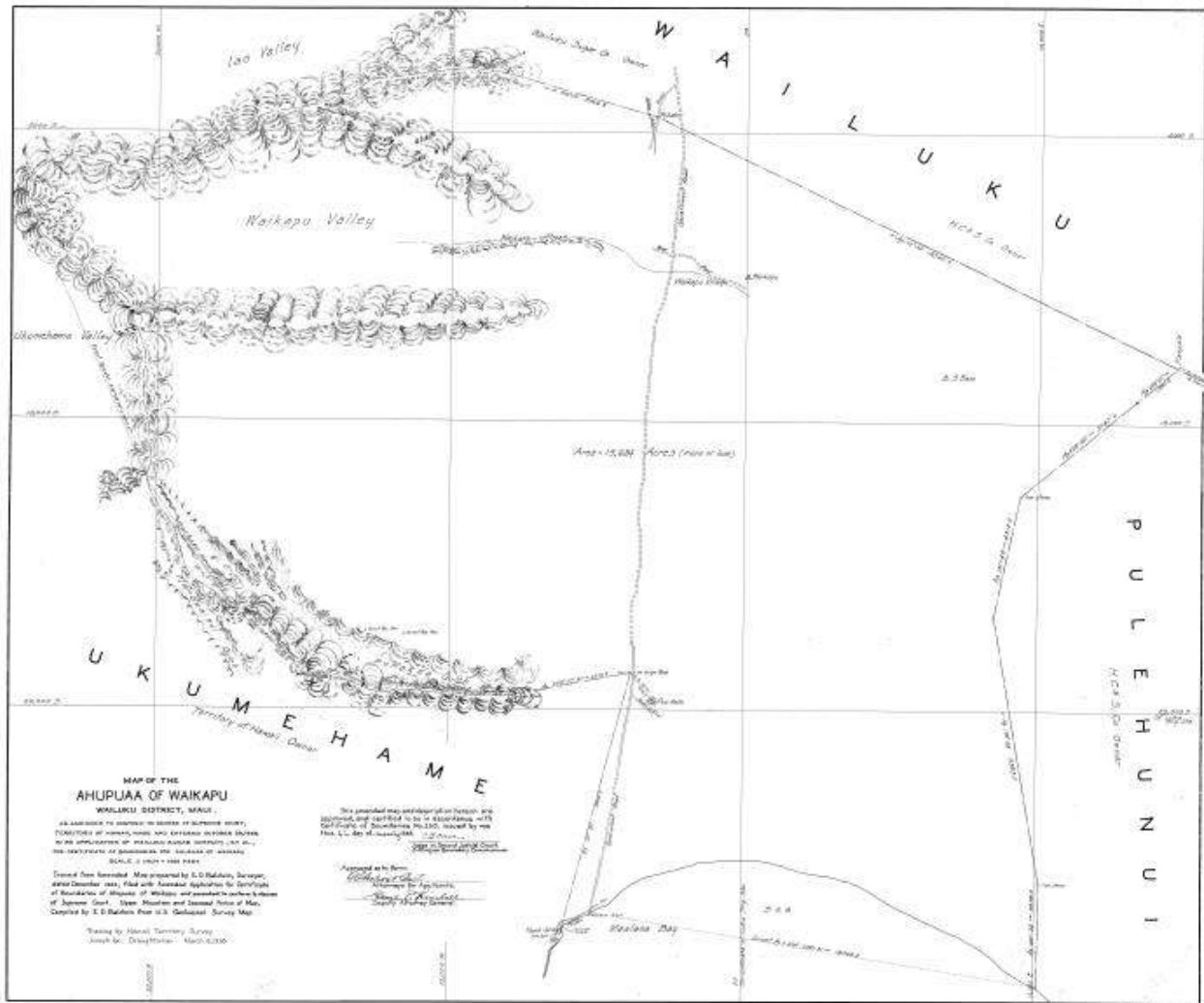


Figure 3. Copy of 1930 Map of Waikapū Ahupua‘a Boundaries by Joseph ‘Iao.

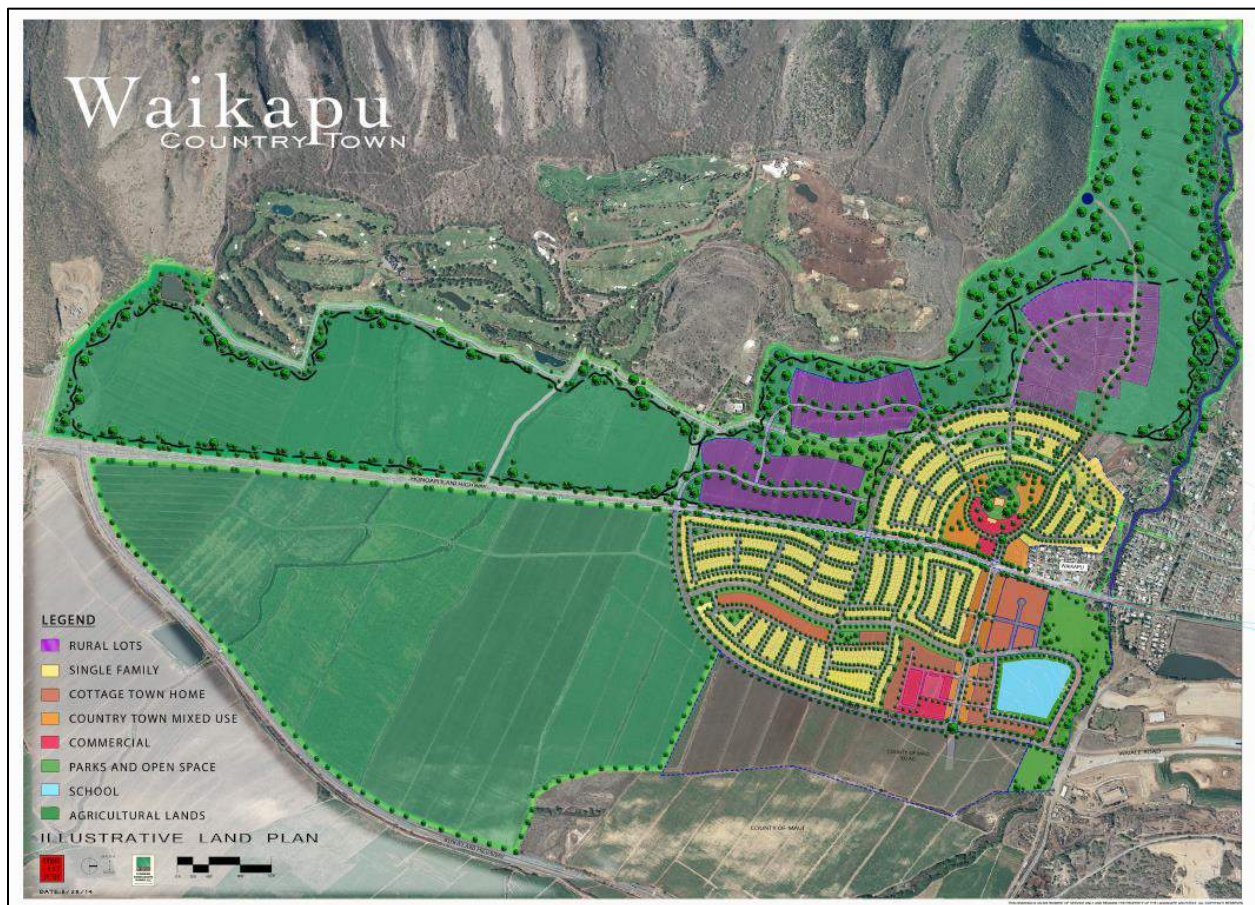


Figure 4. Waikapū Country Town Development – Map and Key.

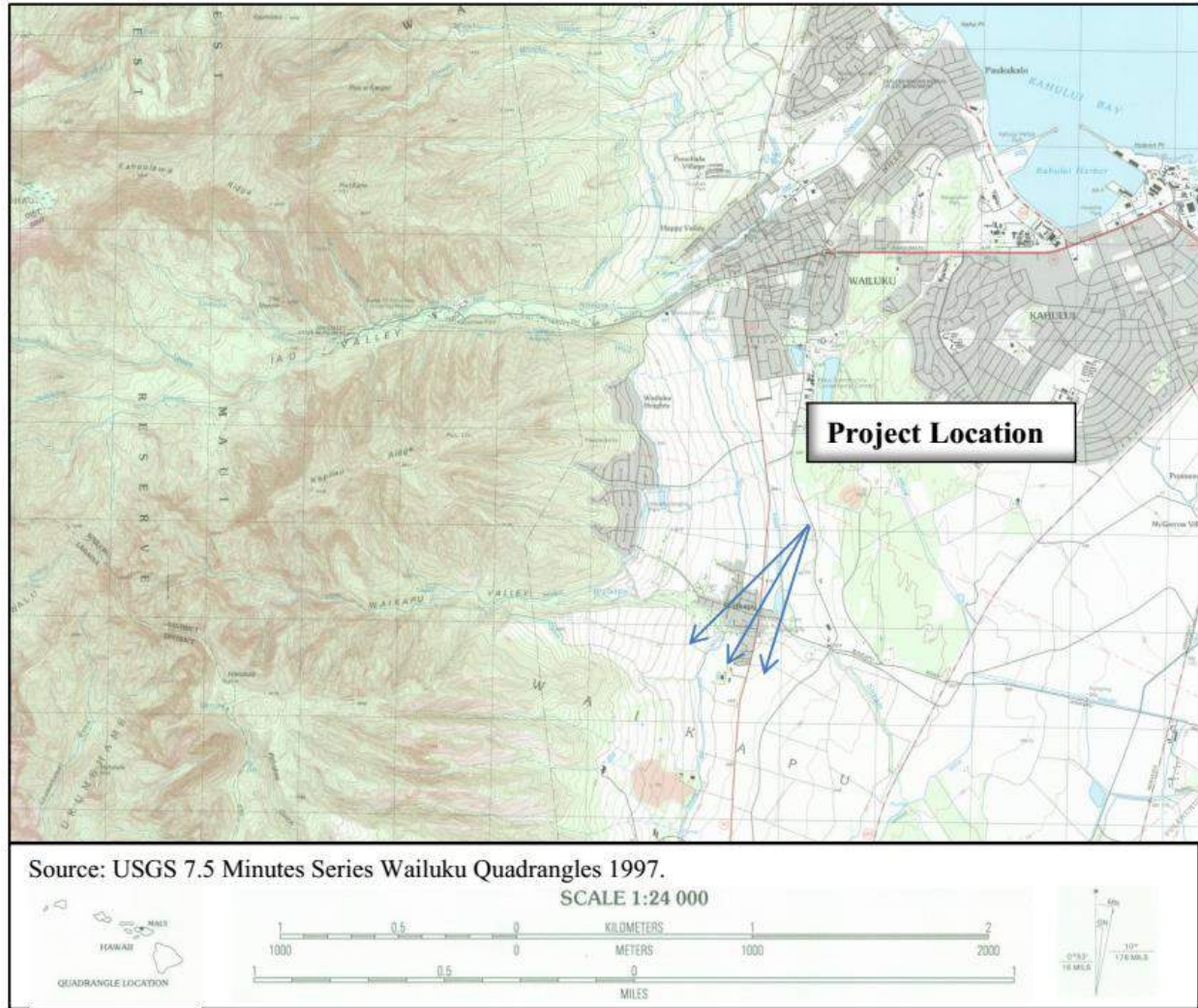


Figure 5. Project Location Map.

Awardee	‘Ili (Subdivision)	Land Commission Award	Royal Patent	‘Āpana (Parcel)	Grant	Acres	Description of Cultural & Natural Resources via Native and Foreign Testimony and Survey Notes	Surveyor
Kupalii	Keana	3546	3151	2		1.2	- Kula - Kalo paukū - Kukui & wiliwili - Borders Waikapū Stream	E. Bailey 5-5-1852
Charles Copp	Papala	236-1	498	2		1.0 (est.)	- Lo‘i kalo (unspecified amount) - Borders Waikapū Stream	Ioane (John) Richardson
Napailoi	Kaloaloo / Loaloo	10481	3131	4		0.66	- Lo‘i kalo (unspecified amount) - Borders Waikapū Stream	E. Bailey 4-23-1852
Opunui	Loaloo	3224	4115	6		0.27	- Lo‘i kalo (unspecified amount) - Borders Waikapū Stream	E. Bailey 6-25-1852
Keaka (W)	Olohe	3549	3122	3		1.0 (est.)	- 3 lo‘i kalo - Borders Waikapū Stream	Unkown
Keaka (W)	Olohe				1511	0.2 (est.)	- Lo‘i kalo (unspecified amount) - Borders Waikapū Stream	Unknown
Kupalii	Mokahelahela / Makaelelu	3546	3151	3		1.0	- 1 house lot	E. Bailey 5-5-1852
Kamakaipoaa / Kamakaipuaa	Kamauehalii	6385	None	2		1.94	- Lo‘i (unspecified amount) - Borders Waikapū Stream	E. Bailey 4-15-1852
Nahau	Olohe	3340	3115	2		0.8	- Mo‘o kula - 1 house lot - ‘Auwai watercourse	E. Bailey 4-11-1852
Joseph Sylva	Waihalulu			3	1844	487.0	- ‘Auwai watercourse - Pens - Stone walls - Native claims retained - Gulch	E. Bailey 4-10-1855
Joseph Sylva	Waihalulu			2	1844	9.52	- Stone walls - Multiple house lot	E. Bailey 4-10-1855
Joseph Sylva	Waihalulu & Paalae			1	1844	22.36	- Native claims retained	E. Bailey 4-10-1855
Napailoi	Waihalulu	10481	3131	2&3		1.3	- 8 lo‘i kalo - Kula - 1 house lot	E. Bailey 4-23-1852
Napailoi	Paalae	10481	3131	1:1		0.54	- Kalo paukū - Kula - ‘Auwai watercourse	E. Bailey 4-23-1852
Napailoi	Paalae	10481	3131	1:2		0.19	- Kalo paukū - Kula	E. Bailey 4-23-1852
Napailoi	Paalae	10481	3131	1:3		0.1	- Kalo paukū - Kula	E. Bailey 4-23-1852
Hakiki	Waihalulu	2577	4948	4		0.2	- 4 lo‘i kalo - ‘Auwai watercourse	E. Bailey 8-14-1852
Kaeha	Olohe	2394	3138	1		1.36	- Kalo paukū - Pūhala - 2 house lots - ‘Auwai watercourse	E. Bailey 6-21-1852
Nalei	Olohe	10460	None	2		0.07	- 2 lo‘i kalo - ‘Auwai watercourse	E. Bailey 4-16-1852
Ehunui	Olohe			1513		0.07 (est.)	- Unknown	Unknown
Ehunui	Olohe	2499	4070	1		0.8	- Kalo paukū - Po‘alima - ‘Auwai watercourse	E. Bailey 6-25-1852
Ehunui	Pikoku	2499	4070	3		1.3	- 7 lo‘i kalo - ‘Auwai watercourse	E. Bailey 6-25-1852

Awardee	‘Ili (Subdivision)	Land Commission Award	Royal Patent	‘Āpana (Parcel)	Grant	Acres	Description of Cultural & Natural Resources via Native and Foreign Testimony and Survey Notes	Surveyor
Kamaipuaa / Kamakaipoaa / Kamakaipuaa	Pikoku	6385	None	1		0.17	- Kalo paukū	E. Bailey 4-15-1852
Koa	Pikoku	3528	3155	1		3.90	- 2 house lots - Kalo paukū - Kula - ‘Auwai watercourse	E. Bailey 8-27-1852
Koa	Pikoku				1708	0.1 (est.)	- 1 lo‘i kalo - ‘Auwai watercourse - 2 burial plots (Maxwell)	E. Bailey 9-9-1854
Hakiki	Olohe	2577	4948	2		0.25	- 7 lo‘i kalo	E. Bailey 8-14-1852
Mohomoho	Kamauhalii			1	1711	0.08	- 1 lo‘i kalo	E. Bailey 9-8-1854
Mohomoho	Kamauhalii			2	1711	0.04	- 1 lo‘i kalo	E. Bailey 9-8-1854
Ihu	Kamauhalii			1	1712	0.09	- 1 lo‘i kalo	E. Bailey 9-15-1854
Opunui	Kamauhalii				1704	1.94	- Unknown	E. Bailey 9-9-1854
Mataio	Kamauhalii	3020	3140	2		2.65	- Kalo paukū - Kula - House lot	E. Bailey 4-15-1852
Keawe (W)	Punia	3520	3135			2.54	- 2 kalo paukū - Kula	E. Bailey 4-15-1852
Makuakane	Punia	2522	3125			1.83	- Kalo paukū	Unknown
Kekua	Kamauhalii	5551	3150	1		0.42	- Kalo paukū	E. Bailey 6-25-1852
Kekua	Kaalea	5551	3150	2		0.1	- 2 lo‘i kalo	E. Bailey 6-25-1852
Kekua	Kamauhalii				1518	0.15 (est.)	- Unknown	Unknown
Kamohai	Kaalea	3527	3156	3		0.2	- Kalo paukū - Kula mo‘o	E. Bailey 8-18-1852
Naanaa	Punia	3337	3136	1,2,3		1.1	- Kalo paukū - Lo‘i kalo - House lot	E. Bailey 4-14-1852
Ihu	Kaalea			2	1712	0.07	- 1 lo‘i kalo	E. Bailey 9-15-1854
Kaai	Kaalea			2	2069	0.18	- Unknown	Unknown
Opunui	Kaalea	3224	4115	5		0.32	- Kula	E. Bailey 6-25-13
Naanaa	Kaalea	3337	3136	4		0.45	- Kalo paukū	E. Bailey 4-14-1852
Poepoe	Kaalea	2609	3124	1,5		0.98	- Kalo paukū - ‘Uala kula - House lot	E. Bailey 8-27-1852
Kaai	Kaalea	5774	4014	2		2.76	- 6 lo‘i kalo - ‘Auwai watercourse	E. Bailey 3-?-1852
Kaai	Kaalea			1	2069	10.46	- Unknown	Unknown
Wahinealii	Kaalea	11022	3142	8		0.6	- House lot	E. Bailey 4-15-1852
Mahoe	Ahuakolea	10160	3148	1		1.99	- Kalo paukū	E. Bailey 4-16-1852
Kamohai	Kaalea	3527	3156	2		0.2	- Kalo paukū	E. Bailey 8-18-1852
Keakini	Kaalea	5324	6374	3		0.56	- 1 lo‘i kalo	E. Bailey 4-24-1852
Kaneae	Kaloapelu	8874	3130	1		0.29	- Lo‘i kalo	E. Bailey 8-26-1852

Awardee	‘Ili (Subdivision)	Land Commission Award	Royal Patent	‘Āpana (Parcel)	Grant	Acres	Description of Cultural & Natural Resources via Native and Foreign Testimony and Survey Notes	Surveyor
Haawahine	Kaloapelu	491	3139	2		0.2	- 1 lo‘i kalo	Unknown
Kamohai	Kaloapelu	3527	3156	1		0.25	- Lo‘i kalo - Kula mo‘o	E. Bailey 8-18-1852
Mahuka	Kaloapelu	462	None	1		0.29	- 6 lo‘i kalo	E. Bailey 2-11-1853
Haawahine	Kaloapelu	491	3139	1		0.2	- 4 lo‘i kalo	E. Bailey 8-?-1852
Kaneae	Kaloapelu	8874	3130	2		0.87	- Lo‘i kalo	E. Bailey 8-26-1852
Haawahine	Kaloapelu	491	3139	3		0.13	- 2 lo‘i kalo	E. Bailey 8-?-1852
Eugene Bal	Kaloapelu			1	2747	0.72	- Unknown	E. Bailey 3-12-1861
Charles Copp	Luapuaa	236	498	1		16.5	- Unknown	E. Bailey ?
John Crowder	Ko‘olau	416	41	1		7.4 (est.)	- ‘Auwai watercourse	J. Richardson 2-2-1847
John Crowder	Aikanaha	416	41	2		1.5 (est.)	- House lot	J. Richardson 2-2-1847
John Crowder	Aikanaha				2904	0.57	- House lot	E. Bailey 6-6-1861
E.W. Gleason	Aikanaha				1674	1.8	- Dry lo‘i kalo	E. Bailey 7-20-1853
Haa	Aikanaha	455	324	2		1.8	- Sugar cane	J. Richardson 3-11-1850
Kaai	Kaloapelu	5774	4014	4		9.9	- Lo‘i kalo - Kula	E. Bailey 3-?-1852
Kaneae	Kaloapelu	8874	3130	3		0.8	- Lo‘i kalo	E. Bailey 8-26-1852
Mahuka	Kaloapelu	462	None	2		0.09	- 5 lo‘i kalo	E. Bailey 2-11-1853
Keakini	Kaloapelu	5324	6374	2		1.82	- 3 lo‘i kalo - Kula - House lot	E. Bailey 4-24-1852
Eugene Bal	Kaloapelu				2342	2.73	- 2 house lots	E. Bailey 2-23-1857
John Boardman	Ahuakolea				2960	23.5	- Reservoir - Stone Walls	E. Bailey
John Boardman	Ahuakolea				3043	4.5	- Reserved rights of natives	Unknown
Henry Cornwell	Unknown				3152	1,200 (est.)	- Board of Education lands - Reserved rights of natives	Unknown
Haa	Aikanaha	455	324	1		33.2	- Sugar cane	J. Richardson 3-11-1850
Eugene Bal	Aikanaha			2	2747	129.8 (port.)	- Potential house lots - Burial sites	
Poonui	Kaumuilio	411	None			3.53	- Lo‘i kalo - House lot	Unkown

Figure 6. Indices of Māhele Awards and Descriptions Associated with Waikapū Country Town Development by Hōkūao Pellegrino