

5.0 RELATIONSHIP TO LAND USE PLANS, POLICIES AND CONTROLS

5.1 STATE OF HAWAII

5.1.1 State Land Use Law (Chapter 205, HRS)

The State of Hawai'i Land Use Law, Chapter 205, HRS, is intended to preserve, protect, and encourage the development of lands in the State for uses that are best suited to the public health and welfare of Hawai'i's people. The State Land Use Commission (LUC) classifies all lands into four land use districts: Urban, Conservation, Agricultural, and Rural. The entire Petition Area is in the Agricultural District, as shown in Figure 5-1.

The Proposed Action will require a State Land Use District Boundary Amendment to reclassify lands from the State Agricultural District to the State Urban District. A petition for Land Use District Boundary Amendment (Docket No. A17-803) has been filed with the State LUC on behalf of Keālia Properties, LLC ("Petitioner"). The Petitioner is seeking to reclassify approximately 53.4 acres of land from the State Land Use Agricultural District to the State Land Use Urban District, to develop approximately 235 residential lots ranging from 5,600 SF to 7,300 SF for empty lot sales. This Draft EIS has been prepared to support this petition.

The State LUC, in accordance with Chapter 15-15 HAR (LUC Rules, 2013), must specifically consider the extent to which the proposed reclassification conforms to the applicable District standards. The standards for determining the boundaries for the Urban District include eight (8) areas which are listed below.

(1) It shall include lands characterized by "city-like" concentrations of people, structures, streets, urban level of services and other related land uses;

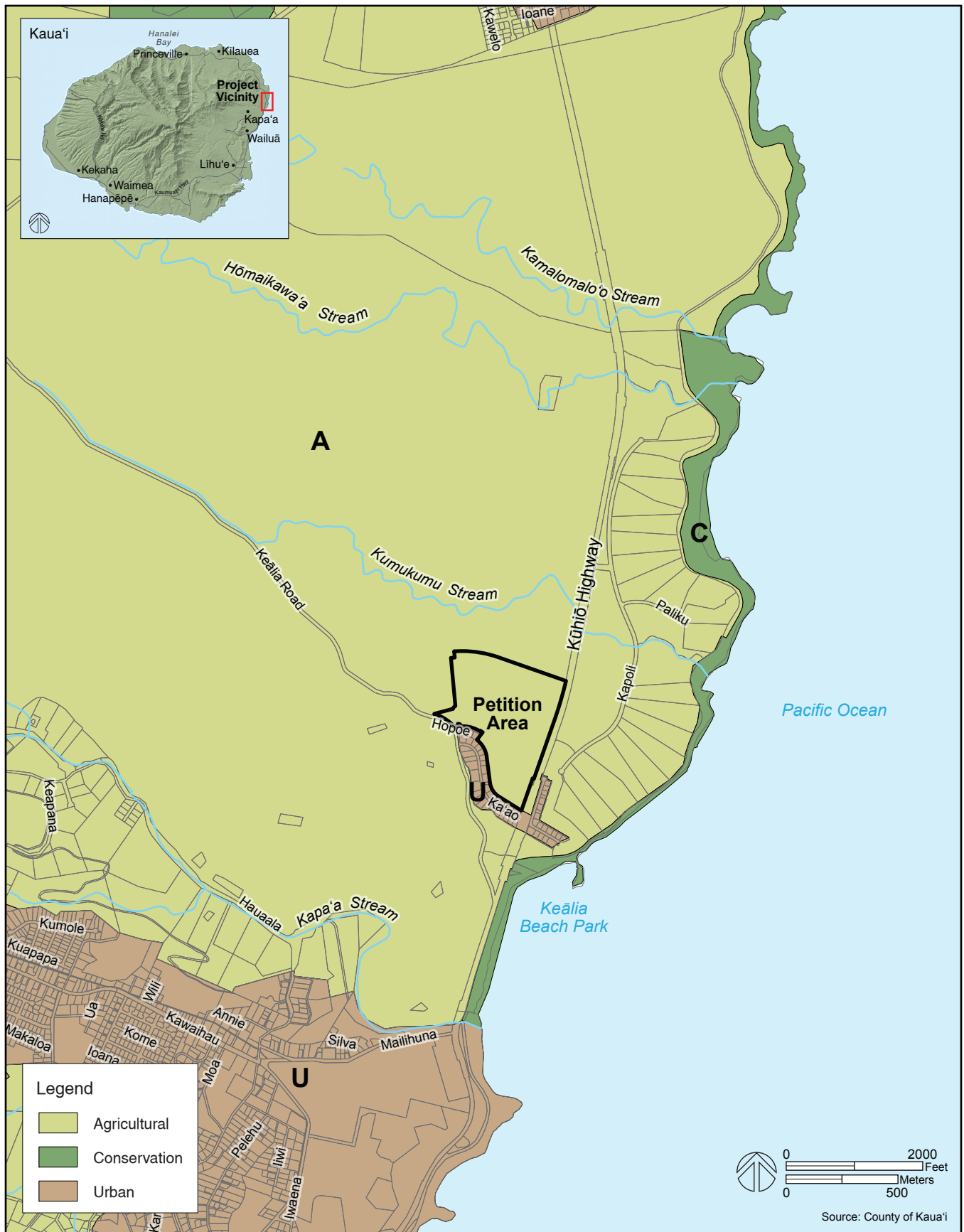
Discussion: The Proposed Action will create approximately 235 single family house lots served by municipal and private utilities and infrastructure, including potable water, stormwater, drainage, wastewater, electrical power, and telecommunications systems. The project is located adjacent to existing single family subdivisions on Ka'ao Road and Hopoe Road. On the *makai* side of Kūhiō Highway, there are single family residences along Kamole Road. The oceanfront Keālia Kai subdivision is also located on the *makai* side of the highway.

(2) It shall take into consideration the following specific factors:

(A) Proximity to centers of trading and employment except where the development would generate new centers of trading and employment;

(B) Availability of basic services such as schools, parks, wastewater systems, solid waste disposal, drainage, water, transportation systems, public utilities, and police and fire protection; and

(C) Sufficient reserve areas for foreseeable urban growth;



State Land Use Districts Map

Keālia Mauka Homesites

Draft Environmental Impact Statement

Kealia Properties, LLC

Figure 5-1

Discussion: The Petition Area is in close proximity to areas of trading and employment, including Kapa'a, the island's largest (most populous) town which is two miles away. Līhu'e, the second largest town on Kaua'i and the county seat, is located approximately ten miles to the south. The East Kaua'i region, which stretches from Līhu'e to Moloa'a (and includes the project area), has evolved into a primary region for economic activity and employment. It is the region of Kaua'i with the most commercial and industrial space, the most businesses, and the most employment opportunities. East Kaua'i is currently the focus of economic activity on the island, with resident population forecast to increase between 35 and 40 percent between now and 2040 (CBRE, 2017).

Utility and infrastructure service will be provided to the Petition Area. The subdivision will utilize a private water system. Public services such as schools, parks and beach parks, police and fire protection are available within the Kapa'a area to serve future residents. The Proposed Action includes construction of a 4.3 acre park/detention basin at the southern entry to the subdivision which will provide passive open space and serve as a buffer between the Petition Area and the adjacent Ka'ao Road subdivision. Another 1.5 acre detention basin at the northeastern corner of the subdivision will also provide an open space buffer. The adjacent Ka'ao subdivision located adjacent to the Petition Area is within the State Urban District. Surrounding *mauka* lands to the west and northwest are within the Agricultural District. These areas are not under active cultivation and are used primarily for grazing. The Petitioner has no plans to develop these surrounding lands.

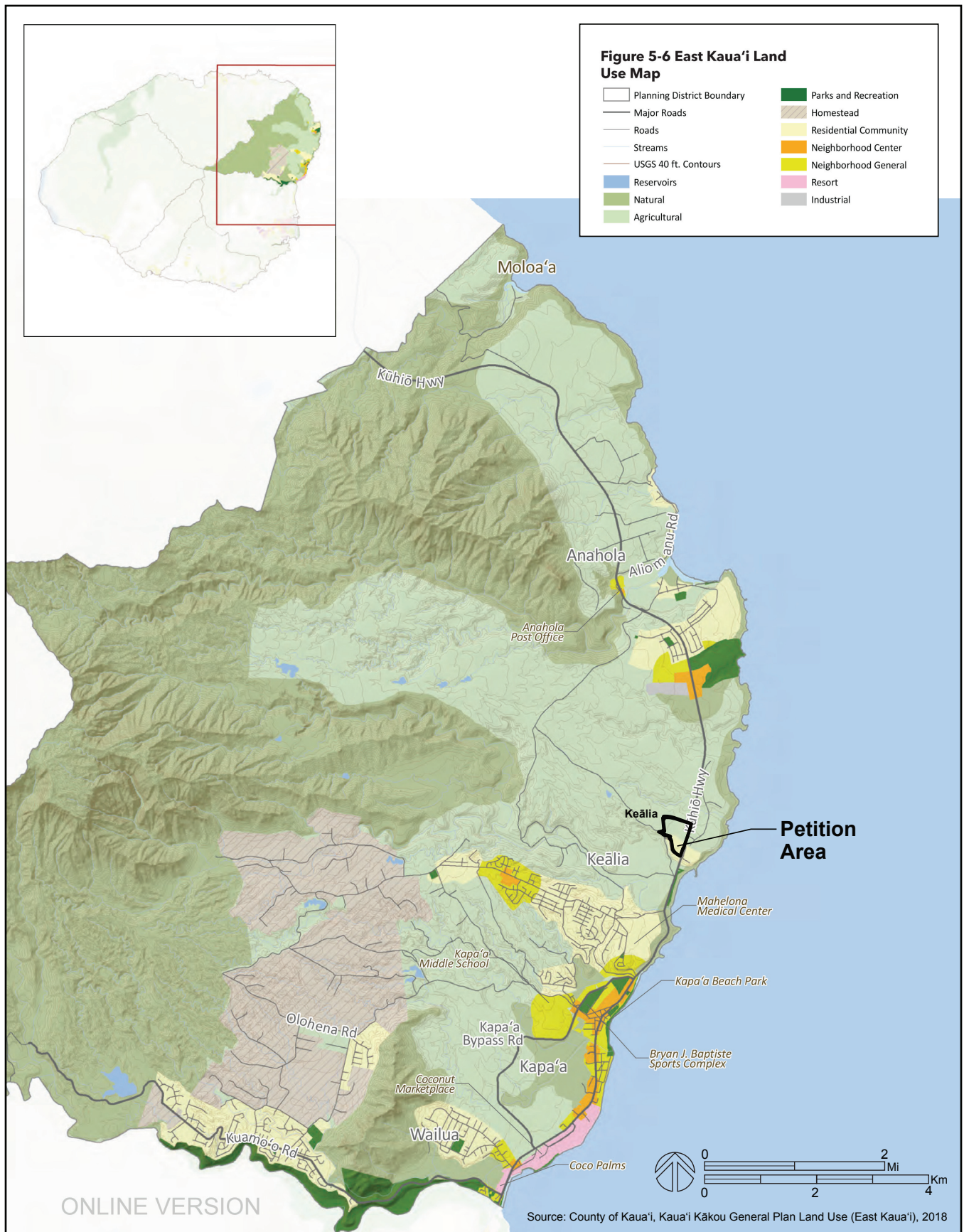
(3) It shall include lands with satisfactory topography, drainage, and reasonably free from the danger of any flood, tsunami, unstable soil condition, and other adverse environmental effects;

Discussion: The Petition Area is readily developable with satisfactory topography and drainage and is free from natural hazard potential such as flooding or tsunami inundation. The proposed infrastructure improvements are not expected to increase susceptibility to natural hazards or have other adverse environmental effects.

(4) Land contiguous with existing urban areas shall be given more consideration than non-contiguous land, particularly when indicated for future urban use on state or county general plans or county community plans or development plans;

Discussion: The Petition Area is immediately adjacent to the existing 36-lot Ka'ao single family subdivision, and includes an area formerly used for plantation housing. There are also three residential lots on Hopoe Road. Another residential community is located on Kamole Road on the *makai* side of Kūhiō Highway. The oceanfront Keālia Kai is a luxury subdivision located adjacent to Keālia Beach Park. In 2016, the County of Kaua'i determined that the Proposed Action was consistent with the County General Plan Land Use Plan, which identified the project area as "Residential Community." The 2018 Kaua'i Kākou Kaua'i County General Plan (County of Kaua'i, 2018) was recently approved by the County Council and signed into law by Mayor Bernard Carvalho Jr. on March 15, 2018. The updated General Plan Land Use Plan for East Kaua'i, shown in Figure 5-2, likewise identifies the project area vicinity for "Residential Community," (see discussion of standard (5) below).

(5) It shall include lands in appropriate locations for new urban concentrations and shall give consideration to areas of urban growth as shown on the state and county general plans or county community plans or development plans;



Kaua'i General Plan Land Use Map (Kawaihau Planning District)

Keālia Mauka Homesites

Draft Environmental Impact Statement

Kealia Properties, LLC

Figure 5-2

Discussion: The State Land Use and County zoning maps show most of the project area designated for agriculture use. The 2000 Kauaʻi County General Plan Land Use Map (Kawaihau Planning District), showed the northern portion of the planning area as Agriculture and the southern portion (which abuts the Kaʻao subdivision) as Residential Community. In a Boundary Interpretation for General Plan Designation (Departmental Determination DD-2016-70) dated July 6, 2016 (see Appendix A), the Planning Department stated “there is clear intent in the 2000 General Plan, along with previous iterations of the plan, that the [Petition] area generally is earmarked for “Residential Community” growth adjacent to the existing subdivision in Keālia above the Keālia General Store.” That is, the proposed residential use is consistent with the intent of the General Plan Land Use Map.

The recently updated General Plan, Kauaʻi Kākou (County of Kauaʻi, 2018) Land Use Plan for East Kauaʻi shows a similar Residential Community designation as the 2000 Plan. As determined by the Planning Department’s Boundary Interpretation of July 6, 2016, the Proposed Action is consistent with the 2018 updated General Plan.

The 53.4 acre project area was also used historically as a plantation camp (New Kumukumu Camp). This plantation camp included improved roads, water and communications infrastructure, and buildings, and remnants of these structures remain today.

The Kauaʻi County zoning map, shown in Figure 5-3 shows the majority of the Petition Area in the Agricultural zone, which is consistent with its location in the State Agricultural District. The zoning map shows small portions of the project area that abut the Kaʻao Road subdivision within the Residential zone, although this may be a mapping discrepancy.

(6) It may include lands which do not conform to the standards in paragraphs (i) to (5): (A) When surrounded by or adjacent to existing urban development; and (B) Only when those lands represent a minor portion of this district;

Discussion: The Petition Area is located adjacent to an existing urban development (residential subdivision) and was determined by the County Planning Department to be consistent with the General Plan Land Use designation as Residential Community.

(7) It shall not include lands, the urbanization of which will contribute toward scattered spot urban development, necessitating unreasonable investment in public infrastructure or support services; and

Discussion: The Petition Area is adjacent to an existing residential use and will not contribute to scattered spot urban development. The Petitioner will construct or participate in developing all additional infrastructure required to service the subdivision. Public (and private) infrastructure and support services are located within reasonable proximity, and are adequate to accommodate the subdivision. It is anticipated that most, if not all future residents of the homesites are current Kauaʻi residents, already being served by community service such as schools, hospitals, and police and fire protection. The Proposed Action will not cause a significant increase in the number of new residents needing public services. Out of 700 projected subdivision residents, 658 are expected to be existing Kauaʻi residents. The other 42 persons may be vacation/second homeowners new to Kauaʻi (CBRE, 2017).

(8) It may include lands with a general slope of twenty percent or more if the commission finds that those lands are desirable and suitable for urban purposes and that the design and construction controls, as adopted by any federal, state, or county agency, are adequate to protect the public health, welfare and safety, and the public’s interests in the aesthetic quality of the landscape.

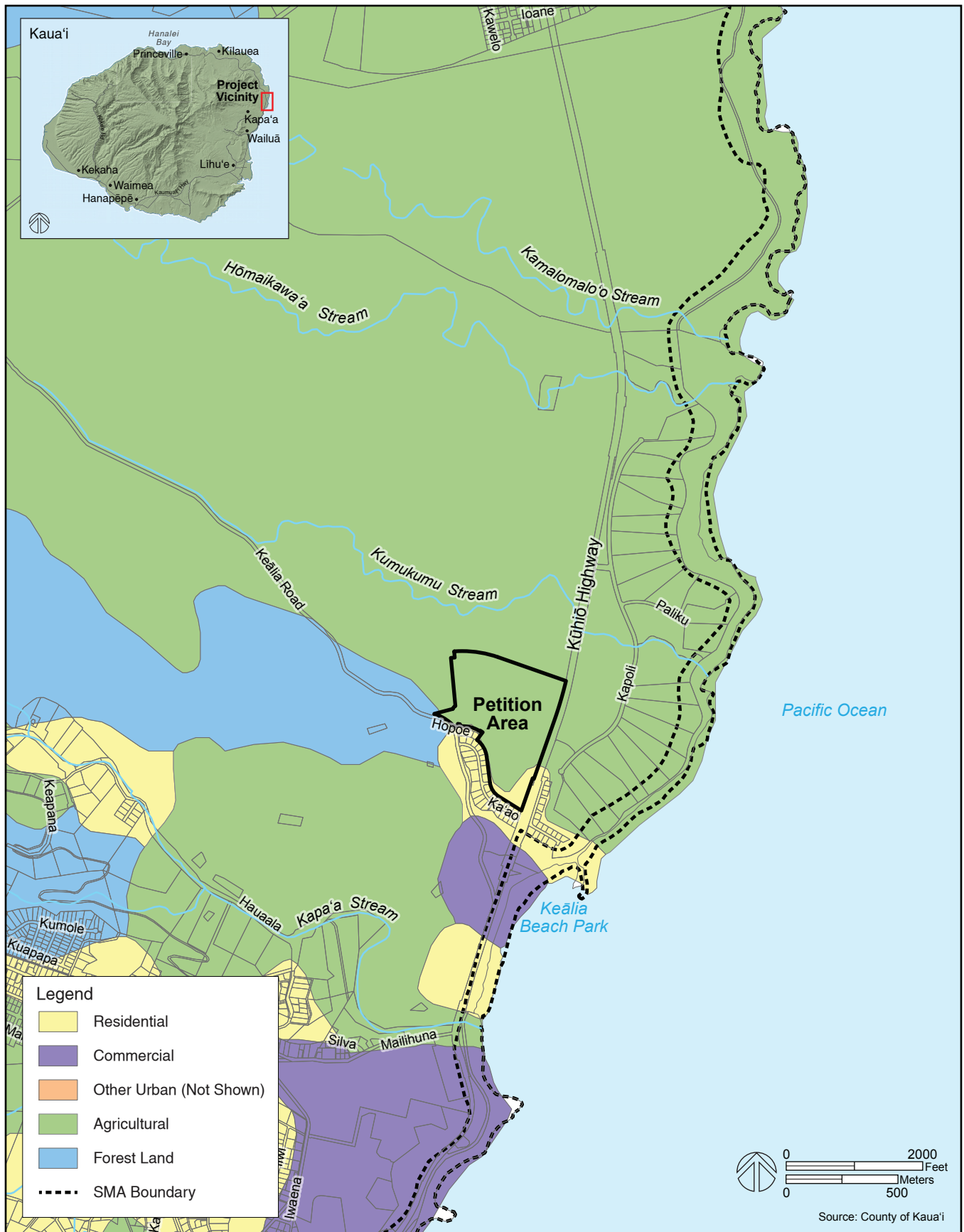


Figure 5-3

Discussion: The Petition Area does not include any lands with slopes above 20 percent. The land slopes gradually upward from Kūhiō Highway to the *mauka* most areas, with slopes about 3 percent.

5.1.2 Environmental Impact Statements (Chapter 343, HRS)

A Chapter 343 environmental review is required due to the project's use of State of Hawai'i and County of Kaua'i lands associated with infrastructure improvement within public roadways, including Kūhiō Highway and Keālia Road.

5.1.3 State Environmental Policy (Chapter 344, HRS)

5.1.3.1 Environmental Policy

The purpose of HRS Chapter 344 is to establish a state policy which will encourage productive and enjoyable harmony between people and their environment, promote efforts which will prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of humanity, and enrich the understanding of the ecological systems and natural resources important to the people of Hawaii. Chapter 344 sets the policy of the state through its programs, authorities and resources to:

(1) Conserve the natural resources, so that land, water, mineral, visual, air and other natural resources are protected by controlling pollution, by preserving or augmenting natural resources, and by safeguarding the State's unique natural environmental characteristics in a manner which will foster and promote the general welfare, create and maintain conditions under which humanity and nature can exist in productive harmony, and fulfill the social, economic, and other requirements of the people of Hawaii.

(2) Enhance the quality of life by:

(C) Establishing communities which provide a sense of identity, wise use of land, efficient transportation, and aesthetic and social satisfaction in harmony with the natural environment which is uniquely Hawaiian; and

Discussion: The Proposed Action is intended to create a new residential community and provide housing opportunities for local residents, addressing the island's unmet housing demand. The proposed site is appropriate for development in physical characteristics and location. Short-term, construction period impacts to air quality, noise and water quality will be addressed through construction best management practices (BMP).

5.1.3.2 Environmental Guidelines

In pursuance of the state policy to conserve the natural resources and enhance the quality of life, all agencies, in the development of programs, shall, insofar as practicable, consider guidelines related to 1) population; 2) land, water, mineral, visual, air and other natural resources; 3) flora and fauna; 4) parks, recreation and open space; 5) economic development; 6) transportation; 7) energy; 8) community life and housing; 9) education and culture; and 10) citizen participation. The proposed Keālia Mauka project is consistent with the following guidelines:

(2) Land, water, mineral, visual, air, and other natural resources.

- (A) Encourage management practices which conserve and fully utilize all natural resources

Discussion: The proposed subdivision will be designed and constructed in accordance with sound management practices. Construction BMPs will be employed to address construction period noise, dust, and stormwater runoff. Extensive grading or cut and fill is not required. There are no wetlands, flood prone areas, or sensitive natural resources on the site. There will be no adverse impact to federally listed species. Vegetated detention basins will be included on site to control stormwater runoff and provide green open space areas.

(8) Community life and housing.

- (A) Foster lifestyles compatible with the environment; preserve the variety of lifestyles traditional to Hawaii through the design and maintenance of neighborhoods which reflect the culture and mores of the community;

- (B) Develop communities which provide a sense of identity and social satisfaction in harmony with the environment and provide internal opportunities for shopping, employment, education, and recreation;

- (D) Foster safe, sanitary, and decent homes;

Discussion: The purpose of the Proposed Action is to provide residential lots targeted to Kaua'i residents. By selling vacant lots, buyers will be able to construct their own homes according to their preferences and at a time most appropriate for their individual situation. This supports the guidelines of preserving lifestyles tradition to Hawai'i and creating neighborhoods that reflect the culture and mores of the community. The project's East Kaua'i location, in proximity to Kapa'a Town and its supporting services, provides future residents with opportunities for shopping, employment, education, and recreation.

5.1.4 Hawai'i State Plan (Chapter 226, HRS)

The Hawai'i State Plan, embodied in Chapter 226 HRS, serves as a guide for the future long-range development of the State of Hawai'i. The State Plan identifies goals, objectives, policies, and priorities for the development and growth. It provides a basis for prioritizing and allocating the limited resources such as public funds, services, human resources, land, energy, and water.

The Proposed Action conforms to most applicable goals, objectives, policies and priority guidelines of the Hawai'i State Plan. The following analyzes project impacts with respect to relevant State Plan goals, objectives, policies and priority guidelines.

5.1.4.1 Section 226-5, Objectives and policies for population

Objective: It shall be the objective in planning for the state's population to guide population growth to be consistent with the achievement of physical, economic and social objectives contained in this chapter.

Policies:

(b)(1) Manage population growth statewide in a manner that provides increased opportunities for Hawaii's people to pursue their physical, social, and economic aspirations while recognizing the unique needs of each county.

(b)(3) Promote increased opportunities for Hawaii's people to pursue their socio-economic aspirations throughout the islands.

Discussion: The proposed subdivision will provide residential lots from 5,600 SF to 7,300 SF in size, and is intended to address the County's residential inventory shortage, responding to the social and economic aspirations of Kaua'i residents. These lots will be sized and priced to target Kaua'i residents and will thereby increase opportunities for families to attain the goal of homeownership.

5.1.4.2 Section 226-11, Objectives and policies for the physical environment--land-based, shoreline, and marine resources.

Objectives: Planning for the State's physical environment shall be directed towards achievement of the objective of enhancement of Hawai'i's scenic assets, natural beauty, and multicultural/ historical resources.

(2) Effective protection of Hawai'i's unique and fragile environmental resources.

Policies:

(b)(2) Ensure compatibility between land-based and water-based activities and natural resources and ecological systems.

(b)(3) Take into account the physical attributes of areas when planning and designing activities and facilities.

(b)(4) Manage natural resources and environs to encourage their beneficial and multiple uses without generating costly or irreparable environmental damage.

Discussion: The proposed subdivision is not located on the shoreline. It will incorporate principles of sound physical planning to manage natural resources and to protect the environment. Installation of roads and utilities infrastructure will take into account the physical attributes of the site. Best management practices will be implemented during site work to reduce and minimize erosion and runoff. The inclusion of two detention basins on site will detain off-site flows and allow particulates and pollutants to settle out. One of the detention areas will also serve as a park for passive recreation, and an open space buffer for the adjacent subdivision. This will mitigate the potential adverse effects of changing land use from agriculture/grazing/fallow to urban development. With the detention basins, there will be no net increase in existing flows during storm conditions. There will be no net increase in runoff from the site and no adverse impacts to nearshore coastal waters.

5.1.4.3 Section 226-12, Objective and policies for the physical environment--scenic, natural beauty, and historic resources.

Objective: Planning for the State's physical environment shall be directed towards achievement of the objective of enhancement of Hawai'i's scenic assets, natural beauty, and multicultural/historical resources

Policies:

- (b)(1) Promote the preservation and restoration of significant natural and historic resources.
- (b)(3) Promote the preservation of views and vistas to enhance the visual and aesthetic enjoyment of mountains, ocean, scenic landscapes, and other natural features.
- (b)(4) Protect those special areas, structures, and elements that are an integral and functional part of Hawaii's ethnic and cultural heritage

Discussion: The Petition Area is not part of a scenic corridor or public view shed. The subdivision will not be visible from the Keālia shoreline. Although the future homes will interfere with the *mauka* view from a short section of Kūhiō Highway, this will only be visible for a few seconds from a passing car. Much of the *mauka* view along this stretch of highway is already obscured by existing vegetation. The open space views from Keālia Road looking toward the site will be altered, especially for residents of the adjacent Ka'ao Road subdivision. The project proposes a green space buffer between the Ka'ao Road subdivision and the project to mitigate this visual impact.

The area and its surrounding lands were used for commercial sugar cultivation and operations for much of the twentieth century, and archaeological studies have identified a number of historic remnants associated with that use on the site. A prior Archaeological Inventory Survey that included the current Petition Area (Drennan et al., 2006) project area recommended no additional archaeological work.

The Literature Review and Field Inspection (LRFI) for the project conducted by Cultural Surveys Hawai'i (2017) concluded that the Proposed Action will require the removal of two historic properties associated with modern agricultural activities. This is an adverse impact but no further archaeological work is recommended. In the event that any significant archaeological resources are encountered during future construction activities, all work in the immediate area will be halted and consultation with SHPD sought in accordance with applicable regulations. The treatment of any remains or artifacts will be in accordance with procedures required by the Kaua'i Historic Preservation Review Commission and the Kaua'i-Ni'ihau Island Burial Council.

5.1.4.4 Section 226-13, Objectives and policies for the physical environment--land, air, and water quality.

Objectives: Planning for the State's physical environment with regard to land, air, and water quality shall be directed towards achievement of the following objectives:

- (1) Maintenance and pursuit of improved quality in Hawai'i's land, air, and water resources.
- (2) Greater public awareness and appreciation of Hawai'i's environmental resources.

Policies:

- (b)(2) Promote the proper management of Hawai'i's land and water resources.
- (b)(3) Promote effective measures to achieve desired quality in Hawai'i's surface, ground and coastal waters.
- (b)(4) Encourage actions to maintain or improve aural and air quality levels to enhance the health and well-being of Hawai'i's people.
- (b)(5) Reduce the threat to life and property from erosion, flooding, tsunamis, hurricanes, earthquakes, volcanic eruptions, and other natural or man-induced hazards and disasters.
- (6) Encourage design and construction practices that enhance the physical qualities of Hawai'i's communities.
- (b)(7) Encourage urban developments in close proximity to existing services and facilities.

Discussion: The Keālia Mauka Homesites will incorporate design principles and features that promote water and energy conservation. The project site is located outside of the flood and tsunami hazard areas. It is not within the County's dam evacuation area. The subdivision plan includes open space areas to provide stormwater retention on site, and which will also provide residents with passive recreation and open space. The project site is within proximity to and compatible with existing residential development, and is convenient to existing public services and facilities in the Kapa'a region.

5.1.4.5 Section 226-15, Objectives and policies for facility systems—solid and liquid wastes.

Objectives: Planning for the State's facility systems with regard to solid and liquid wastes shall be directed towards the achievement of the following objectives:

- (1) Maintenance of basic public health and sanitation standards relating to treatment and disposal of solid and liquid wastes.
- (2) Provision of adequate sewerage facilities for physical and economic activities that alleviate problems in housing, employment, mobility, and other areas.

Policies:

- (b)(1) Encourage the adequate development of sewerage facilities that complement planned growth.

Discussion: The subdivision will connect to the County's Wailua-Kapa'a wastewater collection system. Residential solid waste will be collected by the County, as is done at the adjacent Ka'ao subdivision. No adverse impacts are anticipated.

5.1.4.6 Section 226-16, Objectives and policies for facility systems--water.

Objectives: Planning for the State's facility systems with regard to water shall be directed towards achievement of the objective of the provision of water to adequately accommodate domestic, agricultural, commercial, industrial, recreational, and other needs within resource capacities.

Policies:

(b)(1) Coordinate development of land use activities with existing and potential water supply.

Discussion: Existing residential uses in the vicinity, including lots along Ka'ao and Hopoe Road, are served by a private domestic water system (Keālia Water System), owned by the Keālia Water Company Holdings LLC. The Petitioner has an agreement with the Keālia Water Company to reserve potable water service for future homeowners in the Petition Area. The allocation under the existing water agreement will be adequate to provide for the project's water requirement.

5.1.4.7 Section 226-19, Objectives and policies for socio-cultural advancement--housing.

Objectives: Planning for the State's socio-cultural advancement with regard to housing shall be directed toward the achievement of the following objectives:

(1) Greater opportunities for Hawaii's people to secure reasonably priced, safe, sanitary, and livable homes, located in suitable environments that satisfactorily accommodate the needs and desires of families and individuals, through collaboration and cooperation between government and nonprofit and for-profit developers to ensure that more rental and for sale affordable housing is made available to extremely low-, very low-, lower-, moderate-, and above moderate-income segments of Hawaii's population.

(2) The orderly development of residential areas sensitive to community needs and other land uses.

Policies:

(b)(1) Effectively accommodate the housing needs of Hawaii's people.

(b)(2) Stimulate and promote feasible approaches that increase housing choices for low-income, moderate-income, and gap-group households.

(b)(3) Increase homeownership and rental opportunities and choices in terms of quality, location, cost, densities, style, and size of housing.

(b)(5) Promote design and location of housing developments taking into account the physical setting, accessibility to public facilities and services, and other concerns of existing communities and surrounding areas.

(b)(6) Facilitate the use of available vacant, developable and underutilized urban lands for housing.

(b) (7) Foster a variety of lifestyles traditional to Hawai'i through the design and maintenance of neighborhoods that reflect the culture and values of the community.

Discussion: The purpose of the Proposed Action is to help satisfy the need for housing on the island of Kaua'i, by providing residential lots that are targeted specifically to local residents. The Proposed Action will provide approximately 235 workforce and market housing units. This will help alleviate a projected housing shortfall that will not be met by other planned developments in the Līhu'e/East Kaua'i region.

The proposed lots are consistent with typical densities in the island's existing single family residential communities, and respond to local market preferences. Offering improved, developable lots with infrastructure gives buyers the opportunity to construct the type of house that best meets their needs, within their price range and timetable. There may also be bulk purchasers who will

construct the finished homes and offer them for sale, providing another alternative for prospective homeowners. The proposed project will be in compliance with the Housing Policy for the County of Kaua'i, Ordinance No. 860, including the requirement for workforce housing.

The Petition Area is former agricultural land that is underutilized, and currently serving as pasture with minimal social or economic benefit to the overall region. There will still be more than adequate remaining pasture land in the surrounding area. The location of the Petition Area is convenient to commercial activities and a range of public services. It is also convenient to major employment centers in Kapa'a, Līhu'e and other areas of east Kaua'i.

5.1.5 State Functional Plans

The Statewide planning system requires the development of State Functional Plans which are approved by the Governor of Hawai'i. The State Functional Plans set for the policies, statewide guidelines, and priorities within a specific field of activity. They are intended to guide State and County actions in the areas of agriculture, conservation lands, education, energy, health, higher education, health, historic preservation, housing, recreation, tourism, and transportation.

The State Functional Plan most applicable to the proposed Keālia Mauka project is the State Housing Functional Plan, updated in 2017. The update of the Housing Functional Plan was coordinated by the Hawai'i Housing Finance and Development Corporation and under the guidance of the Office of Planning and the Special Action Team on Affordable Rental Housing, which was established by Act 127, Session Laws of Hawai'i 2016. The Plan presents a balanced set of strategies and implementing actions directed toward meeting Hawai'i's housing needs.

The Plan identifies several issue areas including rental housing, homeownership, and impediments to residential development. For each of these issue areas, the Plan identifies objectives, policies, and implementing actions. There are two issue areas applicable to the proposed project: Homeownership and Impediments to Residential Development. These are discussed below.

5.1.5.1 Housing Functional Plan

Issue Area: Homeownership

According to the Housing Functional Plan, research shows that homeownership has positive impacts on the stability of communities as families support and nurture their homes and surrounding neighborhoods. Yet it notes that homeownership in Hawai'i has been falling steadily since 2006, due to a number of obstacles including 1) college debt and student loans; 2) not making enough money to purchase a home; 3) not enough money for a down payment and closing costs; 4) low housing inventory and new construction increasingly catering to wealthier buyers; 5) tight credit; and 6) high rent burdens, making it difficult to save (HHFDC, 2017). The Plan states that the impact of a slow economic recovery falls heaviest on first-time buyers, and it is their entry to the market that boosts the homeownership rate.

Objective: Increase the homeownership rate

Policy B(3): Ensure that housing projects provide a fair share of affordable for-sale housing opportunities.

Implementing Action B(3)(a): Impose realistic and fair housing requirements on projects that seek Urban land use designations, general or development plan amendments, zoning, or development permits.

Discussion: The primary objective of the Proposed Action is to offer opportunities for homeownership to Kauaʻi residents. The market study conducted for the Keālia Mauka project (CBRE, 2017) estimates that there will be demand for 7,447 additional housing units in the East Kauaʻi region between 2017 and 2040, with about two-thirds of the demand for single family households (4,928 homes). Even with currently proposed housing inventory, there will still be a shortfall of more than 2,000 single family homes/lots. The Keālia Mauka Homesite project will help alleviate the shortfall, and provide up to 235 improved house lots for sale. The lots have been sized and will be priced to offer a range of market and workforce housing products to Kauaʻi residents in compliance with the requirements of the County's housing policy, Ordinance No. 860.

5.1.6 Hawaiʻi Coastal Zone Management Program

The federal Coastal Zone Management (CZM) Program was created through the passage of the Coastal Zone Management Act of 1972 to protect, preserve, develop, restore, and enhance the resources of the nation's coastal zone for current and future generations. Hawaiʻi's Coastal Zone Management Program, adopted as Chapter 205A, HRS, provides a basis for protecting, restoring, and responsibly developing coastal communities and resources.

The State's CZM area includes all lands of the State and the area extending seaward of the shoreline. Each county is required to establish special management areas (SMA) and shoreline setbacks within which permits are required for development. The proposed project is not located within the County's designated SMA or shoreline setback area.

The project's compliance with CZM program objectives is discussed below:

5.1.6.1 Recreational Resources

Objective: *Provide coastal recreational opportunities accessible to the public.*

Discussion: The policies supporting this objective pertain mainly to shoreline resources and access. The proposed project is located across Kūhiō Highway from the coast, but will include open space areas within the project site and is easily accessible to coastal recreational resources, including the Ke Ala Hele Makalae Coastal Path which runs along Keālia Beach. The proposed action is not in conflict with any recreational resources policy.

5.1.6.2 Historic Resources

Objective: *Protect, preserve, and, where desirable, restore those natural and manmade historic and prehistoric resources in the coastal zone management area that are significant in Hawaiian and American history and culture.*

Discussion: Due to the historic agricultural use of the project site for most of the twentieth century, the Petition Area is relatively clear of significant historic sites. The recent LRFI identified five historic features that are associated with previously designated "New Kumukumu Plantation Camp" (SIHP# 50-30-08-7013). The Petition Area was part of a previous Archaeological Inventory Survey (AIS) that recommended no further archaeological work at this historic property, and no

additional work is recommended. Consultation with SHPD is being conducted to obtain concurrence that the Petition Area has been adequately addressed in the prior AIS.

5.1.6.3 Scenic and Open Space Resources

Objective: *Protect, preserve, and, where desirable, restore or improve the quality of coastal scenic and open space resources.*

Discussion: The creation of a residential subdivision on undeveloped land that has been used in agriculture and pasture for the last 100 years will impact scenic and open space resources. The Proposed Action will modify the open space views from the adjacent Ka'ao subdivision, and will briefly be visible from sections of Kūhiō Highway and Keālia Road. The visual appearance of the property will be transformed from an open, undeveloped pasture to an urbanized residential area. Visual impacts to the Ka'ao Road subdivision will be mitigated by the installation of a detention basin/open space area. Policies supporting the CZM scenic and open space objective pertain mainly to shoreline views and open space. The project will not alter shoreline views and is not visible from the Keālia shoreline or the Ke Ala Hele coastal path. The proposed action is not in conflict with any Scenic and Open Space policies.

5.1.6.5 Coastal Ecosystems

Objective: *Protect valuable coastal ecosystems, including reefs, from disruption and minimize adverse impacts on all coastal ecosystems.*

Discussion: The Petition Area is located on the *mauka* side of Kūhiō Highway, more than 1,000 feet from the shoreline. Development of the site for residential lots will not impact the quantity or quality of surface water entering the ocean. The Proposed Action will comply with all federal, state and County of Kaua'i water quality regulations during construction and operation. The Petitioner will prepare drainage and erosion control plans, and follow construction best management practices during site work. Two drainage detention basins are proposed on site to detain off and on-site flows and allow particulates and pollutants to settle out of the water column. These actions will mitigate any potential adverse effects resulting from the proposed transition from agriculture/grazing land use to urban development. The Proposed Action is not in conflict with any Coastal Ecosystems policies.

5.1.6.6 Economic Uses

Objective: *Provide public or private facilities and improvements important to the State's economy in suitable locations.*

Discussion: The Proposed Action does not involve coastal dependent development and this Economic Uses category is not applicable.

5.1.6.7 Coastal Hazards

Objective: *Reduce hazard to life and property from tsunami, storm waves, stream flooding, erosion, subsidence, and pollution.*

Discussion: The Petition Area is not within an identified flood hazard area or area known for subsidence or erosion. It is not within the tsunami evacuation zone. The proposed on- and off-site drainage improvements will mitigate runoff from the site, and there will be no net increase in

runoff. There will be no increase in erosion, subsidence or pollution as a result of the project. The Proposed Action is not in conflict with any Coastal Hazards policies.

5.1.6.8 Managing Development

Objective: *Improve the development review process, communication, and public participation in the management of coastal resources and hazards.*

Discussion: The Petitioner is seeking a State Land Use Commission Boundary Amendment, and an Environmental Impact Statement is being prepared. This Draft EIS provides an analysis of the project's anticipated environmental impacts, and will undergo extensive public review and comment.

5.1.6.9 Public Participation

Objective: *Stimulate public awareness, education, and participation in coastal management.*

Discussion: As mentioned above, the environmental review process will include opportunities for government agencies and citizens to provide their input on the proposed subdivision. The Proposed Action is not in conflict with any public participation policies.

5.1.6.10 Beach Protection

Objective: *Protect beaches for public use and recreation.*

Discussion: The Petition Area is located across Kūhiō Highway more than 1,000 feet from the shoreline. The Proposed Action will not interfere with shoreline access or activities, or with beach recreation. The Proposed Action will not increase beach erosion. It is not in conflict with the policies supporting beach protection, which pertain primarily to shoreline development.

5.1.6.11 Marine Resources

Objective: *Promote the protection, use, and development of marine and coastal resources to assure their sustainability.*

Discussion: The Petition Area is located across Kūhiō Highway, more than a 1,000 feet from the shoreline. There are no streams within the property. The development will include detention basins on site to capture stormwater runoff and allow pollutants to settle out. There will be no net increase in runoff from the site. During the construction of subdivision improvements, best management practices will be followed. Vacant lots will be seeded and grassed to avoid bare surfaces and runoff which could impact marine water quality. Lot purchasers will also be required to implement BMPs prior to and during construction on their individual lots. The Proposed Action is not in conflict with the policies supporting marine resources.

5.1.7. Sustainability

Pursuant to Act 181, Session Laws of Hawaii 2011, the Hawaii State Planning Act provides the policy framework establishing sustainability as a state priority. Under the Act, Sustainability is defined as follows:

- Respect of the culture, character, beauty, and history of the State's island communities;

- Striking a balance between economic, social, community, and environmental priorities; and
- Meeting the needs of the present without compromising the ability of future generations to meet their own needs.

Priority guidelines and principles to promote sustainability shall include:

- (1) Encouraging balanced economic, social, community, and environmental priorities;
- (2) Encouraging planning that respects and promotes living within the natural resources and limits of the State;
- (3) Promoting a diversified and dynamic economy;
- (4) Encouraging respect for the host culture;
- (5) Promoting decisions based on meeting the needs of the present without compromising the needs of future generations;
- (6) Considering the principles of the *ahupua'a* system; and
- (7) Emphasizing that everyone, including individuals, families, communities, businesses, and government, has the responsibility for achieving a sustainable Hawaii.

In considering the Petitioner's application for a land use district boundary amendment, the State Land Use Commission will consider the principles and priority guidelines for sustainability. The following four areas must be addressed in a sustainability plan:

5.1.7.1 Sustainable Development

This is the project's contribution to creating a high quality of life and a mutually supportive balance among environmental, economic, and social equity concerns.

Discussion: The Proposed Action will create 235 residential lots to address an existing and future shortfall of housing in East Kaua'i. This responds to market demand and supports quality of life for local residents. The subdivision is located adjacent to an existing residential area, on land identified for residential community use by the Kaua'i General Plan. The site will be converted from grazing use, but there is ample surrounding land to support these activities. The Proposed Action will comply with the County's Housing Policy (Ordinance 860) for work force housing, addressing social equity concerns. The Proposed Action provides a mutually supportive balance among environmental, economic and social equity concerns.

5.1.7.2 Smart Growth and Livability Principles

There are ten smart growth and livability principles which land use related activities should consider. The Proposed Action is consistent with the following principles:

2. Promote equitable, affordable housing. Expand location- and energy-efficient housing choices for people of all ages, incomes, races, and ethnicities to increase mobility and lower the combined cost of housing and transportation.

6. Value communities and neighborhoods. Enhance the unique characteristics of all communities by investing in healthy, safe, and walkable neighborhoods.

7. Compact Building Design. Design communities to preserve more open space with compact building designs that make efficient use of land and resources.

8. Preserve open space, farmland, natural beauty, and critical environmental areas. Preserve natural areas that provide important community space, habitat for plants and animals, recreational opportunities, places of natural beauty, and critical environmental areas. Protect farm and agricultural lands and promote locally grown foods.

10. Preserve and perpetuate our island cultural values. Consider the *ahupuaʻa* management concept to integrate resource management decisions from the mountains to the sea.

Discussion: The Proposed Action directly supports Principle 2 by providing residential lots targeted to local residents, and meeting the County's work force housing requirements. The Proposed Action is located adjacent to an existing residential neighborhood in an area designated by the General Plan for residential use, consistent with Principle 6. Principles 7 and 8 call for compact design and the preservation of open space. Lot sizes have been kept below 10,000 SF to keep prices within reach of local families, and also to minimize the visual and environmental impact on the surrounding agricultural land and open space. The offering of improved lots responds to market preferences and allows buyers to design and construct their own homes as desired, in accordance with Principle 10.

5.1.7.3 Resource Conservation

Energy Efficiency – incorporate energy efficiency measures in the design, construction, and operation of project/site, infrastructure, and buildings, and use renewable energy generation.

Water Efficiency – incorporate water efficiency measures in the design, construction, and operation of project/site, infrastructure, and buildings, including irrigation and landscaping, and use of non-potable water.

Waste Management – implement solid and liquid waste management, recycling, and reuse.

Low Impact Development – incorporate site design, green infrastructure, and structural best management practices to increase on-site infiltration and reduce off-site flows and pollution from stormwater runoff.

Climate Change and Hazard Mitigation – provide mitigation and adaptation strategies to address the potential risks from natural or man-made hazards, including new or intensified hazards resulting from climate change. These include sea-level rise, hurricanes, tsunamis, drought, wildfires, storm flooding, and coastal erosion.

Discussion: The Proposed Action includes the provision of infrastructure improvements including roads and utilities. Drainage improvements include two detention basins that provide open space and will reduce off-site flows and stormwater runoff. The Petition Area is not within an area vulnerable to natural hazards such as flood, dam flooding, tsunami, coastal hazards. The individual lot buyers will be responsible for constructing their own homes, but will be encouraged to utilize energy efficient design, water efficient features, and renewable energy.

5.1.7.4 Green Building Standards

Hawaii's overall goal for energy efficiency is to meet the Energy Efficiency Portfolio standard of 30% by reducing electricity demands by 2030. The use and pursuit of green building standards such as U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) or similar are encouraged in attaining sustainable community and building designs.

Discussion: Subdivision roads will have sidewalks and access to a green space for passive recreation, encouraging residents to walk within the subdivision. The Petition Area is within a mile of the Ke Ala Hele Makalae multi-use coastal path. However, a major constraint to increased use of sustainable transportation modes such as walking, bicycling and public transit will continue to be the physical conditions of Keālia Road. This two-lane road is narrow, curved and somewhat steep between the subdivision and Kūhiō Highway. It is unlikely that many residents will walk or bike directly from the subdivision down to Kūhiō Highway, where there are bus stops, or to the coast where the multi-use path is located.

Individual lot purchasers will be responsible to construct their homes. Buyers will be encouraged to incorporate green building practices and energy efficient features.

5.2 COUNTY OF KAUA'I

5.2.1 County General Plan

The County of Kaua'i General Plan was adopted in 1971 and updated in 1982, 2000, and most recently, in 2018. *Kaua'i Kākou, Kaua'i County General Plan* was completed and signed into law by Mayor Bernard Carvalho, Jr. in March 2018.

Pursuant to the provisions of the Charter for the County of Kaua'i, the General Plan establishes priorities for managing growth and community development over a 20 year planning timeframe. The General Plan guides future action regarding land use and development regulations, urban renewal, and expenditure for capital improvements. The General Plan covers six planning districts on the island; the Project Area is within the East Kaua'i district.

The General Plan identifies nineteen policies to guide growth and address the issues most important to Kaua'i residents in the face of existing issues and future growth:

1. Manage growth to preserve rural character
2. Provide local housing
3. Recognize the identity of Kaua'i's individual towns and districts
4. Design healthy and complete neighborhoods
5. Make strategic infrastructure investment
6. Reduce the cost of living
7. Build a balanced multimodal transportation system
8. Protect Kaua'i's scenic beauty
9. Uphold Kaua'i as a unique visitor destination
10. Help business thrive
11. Help agricultural lands be productive
12. Protect our watersheds
13. Complete Kaua'i's shift to clean energy

14. Prepare for climate change
15. Respect Native Hawaiian rights and wahi pana
16. Protect access to Kaua'i's treasured places
17. Nurture our keiki
18. Honor our kupuna
19. Communicate with aloha

The proposed Keālia Mauka Homesites project directly responds to the policy to provide local housing. In the General Plan's discussion of the Housing sector, it notes that housing affordability for local residents has reached a crisis level with far-ranging social impacts. Home prices exceed 300 percent of the national average. Lack of housing supply has been due in part to the effects of the Great Recession of 2007-2009. The results at the household level include stress, reduced disposable income, and limit transportation options. The General Plan states that public and private partnerships must work together to ensure that increases in housing inventory will be affordable to residents (County of Kaua'i, 2018).

The Market Study conducted for the Proposed Action estimated the demand for new housing units in Līhu'e/East Kaua'i will range from 6,654 to 8,240 units by 2040, with a midpoint of 7,447. A shortfall of more than 3,500 standard residential units is projected in the study corridor through 2040. The regional single-family sector will be underserved by more than 2,000 homes/lots (CBRE, 2017).

The Proposed Action will provide additional housing inventory by allowing residents to purchase a vacant lot and design and build a home that suits their needs and budget, consistent with the General Plan. The lots will be priced to meet the requirements of the Housing Policy for the County of Kaua'i (Ordinance No. 860, November 20, 2007).

The Proposed Action will also support a jobs and businesses through the provision of construction employment, and secondary economic effects. This is discussed in the discussion of Social and Economic Factors in Chapter 4 of this DEIS.

5.2.1.2 East Kaua'i Land Use Map Designation

The Petition Area is located within the 2018 Kaua'i Kākou General Plan's East Kaua'i Planning District. The Land Use map for East Kaua'i shows an area identified on the legend as "Residential Community" that straddles both sides of Kūhiō Highway in the project vicinity. This portion of the land use map has not changed since the 2000 General Plan (Kawaihau District Land Use Map). Because the Land Use Maps are conceptual and do not include parcel lines, the Petitioner requested clarification from the County in 2016.

5.2.1.3 Boundary Interpretation for General Plan Designation

In June 2016, the Petitioner, Keālia Properties, LLC, requested a Boundary Interpretation for General Plan Designation from the County of Kaua'i Planning Department. The interpretation was requested "for the purpose of applying for, communicating, processing, and securing information and permits related to development and regulatory interest of the owner in the County of Kaua'i." The Planning Department was asked to determine whether the 2000 General Plan Land Use Map for the Kawaihau District could be interpreted to be consistent with the proposed Keālia Homesites subdivision.

The request noted that according to the General Plan document, the General Plan is intended to be a direction setting policy document, and is not intended to be regulatory in the sense of a zoning code or other land use regulation. The applicant's letter stated the following:

Clearly, the policy for the land identified in yellow on the Kawaihau Planning District Land Use Map in the vicinity of Ka'ao Road is intended as a general guideline to establish a larger pattern of residential development than currently exists. We believe the proposed subdivision on about 50 acres, which includes about 230 lots that average about 6,000 square feet in size, is consistent with the intent of the General Plan, due to its location in relation to the Residential Community designation on the Land Use Map...

...In summary, we believe this request is appropriate for the following reasons:

- The proposed subdivision is consistent with the location of a "Residential Community" designation on the Kawaihau Planning District Land Use Map
- The proposed subdivision is located adjacent to an existing residential subdivision
- The vicinity was used for expanded residential purposes to support the Makee Sugar Plantation (later absorbed by the Līhu'e Sugar Plantation) through the 1960s
- The average lot size of the proposed subdivision is targeted for local residents, addressing a need identified in the General Plan to provide a mix of housing opportunities on Kaua'i
- The additional housing inventory partially satisfies a shortfall in needed housing units recognized by the General Plan.

In a Departmental Determination (DD-2016-70) dated July 5, 2016 [Boundary Interpretation for General Plan Designation, TMK (4) 4-7-004:001] (Appendix A) the County Planning Department stated that *"there is clear intent in the 2000 General Plan, along with previous iterations of the plan, that the area generally is earmarked for 'Residential Community' growth adjacent to the existing subdivision in Keālia above the Keālia General Store...The proposed Conceptual Keālia Subdivision would generally be in alignment with the General Plan's land use maps and texts."*

In summary, the land use map for the Petition Area in the current Kaua'i Kākou 2018 General Plan has not changed since the 2000 General Plan. It is assumed that the County's July 5, 2016 Boundary Interpretation remains valid. The Keālia Mauka Homesites is consistent with the intent of the General Plan land use maps.

5.2.2 East Kaua'i Development Plan

Development Plans are intended to direct physical development and public improvements within a specific geographic area of Kaua'i County within the framework of the General Plan. Kaua'i County is currently updating the Kapa'a-Wailua Development Plan, renamed the East Kaua'i Development Plan (EKDP). East Kaua'i covers the area from the Wailua Golf Course to Moloa'a, from the mountains to the coastline, and include the Keālia Mauka area. A draft of the updated EKDP is currently being reviewed by the County.

5.2.3 County Zoning

The County of Kaua'i's Comprehensive Zoning Ordinance (CZO) provides regulations and standards for land development and the construction of buildings and other structures in the County of Kaua'i. These regulations and standards prescribed are intended to regulate development to ensure its compatibility with the overall character of the island. The CZO was initially adopted in 1972. Since that time, there have been several amendments to specific provisions. The County concluded the first of two phases of an effort to update the CZO with amendments adopted on December 3, 2012 (Ordinance No. 935). Ordinance No. 935 is the newly adopted zoning code for the County of Kaua'i and will serve as the official zoning code until the County completes the second phase of the project.

Discussion: The Petition Area is zoned agriculture by the County of Kaua'i. This zoning is consistent with the Petition Area's current State Land Use designation as Agricultural District. The General Plan for Kaua'i and the Kapa'a Town Development Plan both designate the general project area as Urban Center. As discussed above, in a Departmental Determination (DD-2016-70 dated July 5, 2016), the Planning Department determined that the Petition Area is within the general area earmarked for residential community growth, and that the Keālia Mauka project would generally be in alignment with the General Plan land use maps.

Following the State Land Use District Boundary Amendment (from Agricultural to Urban), a zone change application will be initiated to change the zoning designation to R-6 Residential District. Given the size of the proposed lots, no more than one single family dwelling unit will be allowed to be developed on each lot.

5.2.4 Special Management Area (SMA)

The Hawai'i Coastal Zone Management Program embodied in Chapter 205A, HRS contains the general objectives and policies to preserve, protect, and where possible, to restore the natural resources of the coastal zone of Hawai'i. Each County has structured specific legislation and designated Special Management Areas (SMA) and Shoreline Setback Areas, designated for more intensive management. Any development within the SMA requires a SMA Use Permit. The SMA boundary in the project area is shown on Figure 5-3. The project site is outside the SMA area.

5.2.5 Housing Policy for the County of Kauaʻi (Ordinance 860)

5.2.5.1 Ordinance 860

Ordinance No. 860, adopted by the Kauaʻi County Council in November 2007, established a County housing policy in furtherance of the goals and objectives identified for the Kauaʻi County Housing Agency in Section 2-1.16 of the Kauaʻi County Code 1987. Ordinance 860 amended the Kauaʻi County Code by inserting a new chapter, Chapter 7A, entitled “Housing Policy for the County of Kauaʻi.”

Chapter 7A, Kauaʻi County Code requires that a portion of residential and resort developments on Kauaʻi include “workforce housing,” defined as dwelling units that “may be rented or sold at price levels that are affordable to households that earn from eighty percent (80%) and below of the Kauaʻi median household income to one hundred forty percent (140%) of the Kauaʻi median household income.” Specific household income limits and sales/rental prices that meet these categories are established each year by the federal Department of Housing and Urban Development (HUD). Ordinance 860 stated that the term “workforce housing” was to hereinafter be used collectively in place of the terms “low income,” “affordable,” and “employee” housing formerly used to describe income groups related to housing requirements and programs established for residential and resort development.

Administrative Rules for the implementation of the County housing policy were adopted on July 21, 2015. They are known as “The Administration of Chapter 7A, Kauaʻi County Code, Pertaining to the Housing Policy for the County of Kauaʻi.”

All State Land Use District Boundary Amendments, Zoning District Boundary Amendments, amendments into the Visitor Destination Area, subdivision, zoning permits, and building permits are subject to the provisions of the Housing Policy, as it applies to residential and hotel development. The workforce housing assessment for an applicable project is resolved with the County Housing Agency prior to final subdivision or zoning permit approval, whichever occurs first. Thirty percent of all proposed units shall be subject to the requirement of Ordinance 860. This equates to 71 of the total 235 lots proposed by the Proposed Action.

5.2.5.2 General Requirements

For residential developments with twenty six (26) units or more, a developer is required to satisfy the workforce housing requirement based on the total number of residential units. Workforce housing units shall be sold to households at the various income categories in accordance with the following:

- Twenty percent (20%) of total units priced to be affordable to households earning up to eighty percent (80%) of the Kauaʻi median household income
- Thirty percent (30%) of total units priced to be affordable to households earning up to one-hundred percent (100%) of Kauaʻi median household income
- Thirty percent (30%) of total units priced to be affordable to households earning up to one-hundred twenty percent (120%) of Kauaʻi median household income
- Twenty percent (20%) of total units priced to be affordable to households earning up to one-hundred forty percent (140%) of Kauaʻi median household income

Incentives are available to developers for projects that incorporate: a) Integration, b) Single Family Units, c) Building “Green”, and d) Low-Income Rental Units. Incentives can modify the workforce housing requirements and are granted at the discretion of the County Housing Agency. The Keālia Mauka Homesites project may be eligible for incentives under the Integration and Single Family Units categories. The maximum cumulative incentive allowed is fifty percent (50%) of the general workforce housing requirements stated above.

The incentive for “Integration” is available for developments that integrate all workforce unit with market rate units. If all workforce units are integrated with market units, the percentage workforce housing requirement shall be reduced by a factor of twenty-five percent (25%) from that stated above. The incentive for “Single Family Units” is available if a developer provides all single family detached units for sale, and may reduce the workforce housing requirement by a factor of twenty-five percent (25%) from that stated above. Using these incentives, the workforce housing requirement for the Keālia Mauka Homesites is 36 units.

Discussion: The County Housing Policy is applicable to requested land use entitlements, such the current Land Use District Boundary Amendment, zoning district boundary amendments, subdivision, zoning permits, and building permits. The Proposed Action will comply with all applicable provisions of Ordinance 860 regarding workforce housing.

The County of Kaua‘i provides guidelines on current (2017) “for sale limits” by income level and family size. The numbers below, effective April 14, 2017, show residential “for sale” prices by income level for a family of four. It assumes a Kaua‘i median household income of \$79,200. The prices are for house and lot, and the County Housing Agency indicated it does not publish “for sale limits” for lot-only sales. Therefore, a lot-only price was estimated, assuming that the lot-only price will represent approximately 26% of the total for sale price. The numbers shown assume monthly property tax and insurance expenses of \$250, maintenance/association fees of \$200, and a down payment of 5.00%. A 30-year fixed interest mortgage rate of 4.25% was assumed.

Table 5-1: For Sale Limits by Income Level

Mortgage Rate: 4.25%

HUD Income Limit (family of 4)	Annual Household Income	For Sale Price	Estimated* Lot- Only Sales Price
80% Median	\$68,250	\$310,800	\$81,000
100% Median	\$79,200	\$369,300	\$92,000
120% Median	\$95,050	\$453,800	\$95,050
140% Median	\$110,900	\$538,400	\$110,900

Source: Kaua‘i County Housing Agency, effective 4/14/2017, URL=<http://www.kauai.gov>

**Assumes lot-only price will represent approximately 26% of the For Sale Price established by County. Actual lot-only prices to be determined by County of Kaua‘i Housing Agency*

5.2.6 Other County Plans

5.2.6.1 *Kaua'i Economic Development Plan*

In 2004, the County's Office of Economic Development, in partnership with the Kaua'i Economic Development Board and the Office of State Planning, spearheaded a community-based effort to create an economic development plan for the next ten years. The result was the *Kaua'i Comprehensive Economic Development Strategy (CEDS), Update 2016-2020*. plan focused on diversifying the Kaua'i economy beyond tourism, while also playing to the strengths of our tourism-based economy and the values our community has embraced through the County's General Plan Update of 2000.

The document also serves as Kaua'i's Comprehensive Economic Development Strategy (CEDS) for the purpose of accessing grant funding through the U.S. Department of Commerce Economic Development Administration (EDA).

While acknowledging that tourism is the primary economic engine for Kaua'i, the plan the widespread recognition that Kaua'i must focus on diversifying its economy and growing other industries to increase economic resiliency and provide further opportunities for residents. The CEDS focused on six target industry clusters:

- 1 Food and Agriculture
- 2 Sustainable Technologies and Practices
- 3 Science and Technology
- 4 Health and Wellness
- 5 Sports and Recreation
- 6 Arts and Culture

The study summarized the current strengths, weaknesses, opportunities and threats (SWOT) regarding economic development on Kaua'i. Listed among the weaknesses was "Increasing lack of affordable housing" and the "Need for greater recruitment and retention of educators and education administrators, who often move after a couple of years on the island because of the high cost of living."

The Proposed Action, Keālia Mauka Homesites project, will support the following Goals (G) and Objectives (O) and Action Items (A) listed in the CEDS:

G1: Build, attract and retain a 21st century workforce.

O2: Increase hiring and retention of Kaua'i residents among target industry cluster companies and organizations to reduce or prevent "brain drain."

G8: Enhance the community's ability to thrive

O3: Increase the quality and affordability of life on Kaua'i.

A1: Increase availability of affordable housing

Discussion: Increased housing opportunities, particularly for local residents, is critical to quality of life and future economic development. Lack of affordable housing is often cited as a major reason it

is difficult to retain talented employees and local youth on island. The provision of 235 single family house lots that are targeted to a local market will enhance housing opportunities, indirectly supporting the island's economic development goals.

5.2.6.2 *Kaua'i Water Use and Development Plan (WUDP)*

The *Kaua'i Water Use and Development Plan* (WUDP) is currently being updated by the County of Kaua'i. The State Water Code, Chapter 174 HRS, requires the State Commission on Water Resources Management (CWRM) to implement and utilize comprehensive water resources planning its regulation and management of the State's water resources. The Water Code sets the requirement for the development and update of the *Hawai'i Water Plan* (HWP), a long-range guide for water resource management. The HWP consists of five major components (plans) identified as the: 1) Water Resource Protection Plan; 2) Water Quality Plan; 3) State Water Projects Plan; 4) Agricultural Water Use and Development Plan; and 5) County Water Use and Development Plans (WUDP). These individual plans are to be integrated into a comprehensive "master plan" to provide for effective coordination and long range planning between state and county agencies to link water use, development, and protection of the resource. Each county is responsible to update their respective WUDP.

The original Kaua'i WUDP was adopted by the County Council in 1990, and updated in 1992, but the update was not officially adopted by the CWRM. The current update of the WUDP will include a uniform, island wide review of the sustainability of land use plans, policies and designations. The intent of the WUDP is to guide the County in its planning, management and development of land use and water resources strategies and policies for sustainable development. It will include an inventory of existing water uses, an assessment of available water resources, future water demand projections, and master plan level resource and facility recommendations (CWRM, 2015).

5.2.6.3 *County of Kaua'i Multi-Hazard Mitigation and Resilience Plan, 2015 Update*

The federal Disaster Mitigation Act of 2000 establishes criteria for developing state and local hazard mitigation plans. The development of state and local (County) hazard mitigation plans is a requirement for maintaining eligibility for future Federal Emergency Management Agency (FEMA) mitigation and disaster recovery funding. Both state and local plans must be updated every five years. Hawai'i's first approved Multi-Hazard Mitigation Plan went into effect in 2004, and the most recent update became effective on August 19, 2013.

The *County of Kaua'i Multi-Hazard Mitigation and Resilience Plan* was updated and approved in August 2015. The County plan notes that Kaua'i has experienced a range of climate and hydrological hazards, geological hazards, and technological hazards that have resulted in great costs to lives, property, and the economy. The specific hazards identified include: hurricanes, floods, drought, wildfire, erosion, landslides, climate change, earthquakes, tsunami, dam failure, hazardous materials, homeland security threats, and health-related hazards. Climate change and dam failure were newly added in 2009.

Kaua'i County's updated *Multi-Hazard Mitigation and Resilience Plan* utilized current data to update the risk and vulnerability assessment for these hazards. The Plan notes that in addition to the technical aspects used in conducting risk and vulnerability assessments, there is a need to understand the deeper causes of disaster, which can also result from poor socioeconomic conditions of an affected community. When this underlying condition is present, it deepens the impact on a community's ability to respond and recover to disasters. Some of these issues include

poverty and social justice. The high cost of housing for working families on Kauaʻi was identified as increasing the risks to families because they may not be able to afford adequate housing, or several families may dwell in homes with supporting infrastructure designed for fewer tenants (County of Kauaʻi, 2015).

The Mitigation Priorities section of the *Multi-Hazard Mitigation and Resilience Plan* recognizes that hazard mitigation depends on appropriate land use policies and practices, including zoning and coastal zone management, flood control, building codes and standards, infrastructure development and standards, regulatory measures, incentive programs, and participatory planning methods. The document identifies mitigation goals, objectives and priorities, and a list of mitigation actions.

Among the “multi-hazard actions” identified for ongoing implementation are:

Look for funding and planning opportunities to develop more affordable housing in Kauaʻi County to meet critical needs of the working population and the poor. [Kauaʻi County] has the highest cost of housing in the four counties, and the high cost of housing and property taxes have resulted in higher costs for rent as well as mortgages, which make it difficult for the younger people to afford to live affordably. In addition, the high demand results in more families occupying homes, which puts added pressure on infrastructure and utilities (water usage, energy, roadways/parking).

[Kauaʻi County Housing Agency] continues to work with the county agencies to seek opportunities to improve housing stock, and to use the most updated building codes in development projects. (Table 7.1, 2015 Kauaʻi County Mitigation Actions, County of Kauaʻi, 2015)

Discussion: The Proposed Action is not located in an area susceptible to hazards such as flood, erosion, tsunami or landslides. The Petition Area is not within the State DLNR’s dam evacuation area, which is limited to lands south of Keālia Road. However, if Keālia Road is affected by dam-related flooding, access for subdivision residents could also be impacted.

Kauaʻi County’s *Multi-Hazard Mitigation and Resilience Plan* clearly links the availability of affordable housing to community resilience and hazard mitigation. The Proposed Action is specifically intended to increase housing opportunities for Kauaʻi residents, and will meet the County’s workforce housing policy. In this way, the Proposed Action promotes community resilience and is consistent with the County’s 2015 *Multi-Hazard Mitigation and Resilience Plan*.

5.3 TRANSPORTATION PLANS AND INITIATIVES

5.3.1 Federal-aid Highways 2035 Transportation Plan for the District of Kauaʻi

The *Federal-Aid Highways 2035 Transportation Plan* (“Plan”) for the District of Kauaʻi was developed by the State of Hawaiʻi Department of Transportation (HDOT, 2014). The Plan is an update of the *Kauaʻi Long-Range Land Transportation Plan* developed in 1997, and provides guidance for decision making on future improvements for “federal-aid highways” on Kauaʻi through Year 2035. Federal-aid highways include roads under both state and Kauaʻi County jurisdiction which are classified as collectors and arterials. It does not include local roads or rural minor collectors. The Plan states that Kūhiō Highway (from Lihue) is a “principal arterial” that provides access to Kapaʻa and Wailua. North of Kapaʻa (including in the Keālia area), Kūhiō Highway continues around the northeast perimeter of the island as a “minor arterial” through Anahola and

Princeville. Therefore, the Plan applies to Kūhiō Highway in the project vicinity. The Plan does not apply to Keālia Road or Ka'ao Road.

The Plan was developed around a set of eight federal planning factors that are intended to address transportation comprehensively: 1) Safety, 2) Transportation Access Mobility, 3) System Efficiency Management & Operations, 4) Economic Viability, 5) Environment and Sustainability, 6) Modal Integration, 7) System Preservation, and 8) Security.

Stakeholder input was incorporated to identify the following needs and deficiencies of the land transportation system on Kaua'i:

- Addressing capacity needs and congestion
- Providing emergency access/egress to communities
- Improving safety of non-motorized modes
- Maintaining clear highway operations during heavy rains.

The Plan identifies potential solutions to address the recognized needs and issues on Kaua'i. This "wish list" of long-range potential solutions includes projects that address system preservation, safety, capacity, and congestion needs as well as multimodal infrastructure solutions. The list of potential solutions did not consider fiscal constraints, but instead intended to establish the vision and long-term (20+ year) transportation plan for Kaua'i.

The Implementation section of the plan is intended to help set priorities for the Statewide Transportation Improvement Program (STIP), given funding realities and constraints. The STIP is a list of improvements that can reasonably be expected to be completed with available funds over a four year period. In order to bridge the gap between the long-term plan and the four-year STIP, the Plan focuses on a "Mid-Range Plan," representing what is achievable within an 8 to 10 year horizon, given current funding. Both the long-range plan and Mid-Range plans provide guidance to and feed specific projects into the STIP.

The Plan identifies potential sources of federal and State funding, and supplemental funding strategies. It discusses the need to reduce transportation infrastructure funding needs through land use planning, including the development of more intensive development. More intensive development can lead to greater transportation options by making alternate forms of transportation such as walking, bicycling, and mass transit more feasible and attractive.

Discussion: Chapter 4 of the Draft EIS (Section 4.11, Roadways and Transportation) and the Traffic Impact Analysis Report (TIAR) (Appendix H) provide a comprehensive description of existing roads, bikeways, pedestrian systems, and bikeway systems in the vicinity of the Petition Area. The TIAR identifies the numerous State and County roadway and transportation improvements that are proposed for the Kapa'a region, including the Kūhiō Highway/Mailihuna Road intersection where a roundabout is proposed, the proposed Kapa'a Bypass Road extension, and a new connection from Hauaala Road to the Bypass Road. These proposed improvements are identified in the *Federal Aid Highways 2035 Transportation Plan*. The TIAR estimates the level of service (LOS) at nine study intersections with and without the Proposed Action and other proposed improvements.

A recommended mitigation measure for the Proposed Action is the installation of a traffic signal at Kūhiō Highway at Keālia Road. This mitigation will address project-related traffic on this federal-aid highway. No other federal aid roadways require mitigation as a result of the Proposed Action.

From a land use planning perspective, the expansion of an existing residential area (adjacent to Ka'ao Road subdivision) represents the type of land use intensification that the *Federal Aid Highways 2035 Transportation Plan* indicates could increase the future viability of walking, biking, and transit use. In this respect, the Proposed Action supports and is consistent with the *Federal Aid Highways 2035 Transportation Plan*.

5.3.2 Kapa'a Transportation Solutions

The Kapa'a Transportation Solutions project was a joint effort between the HDOT and the County of Kaua'i, and its purpose was to develop "near to mid-term" transportation solutions to address mobility needs and congestion for all modes of transportation in the Kapa'a area. The project built upon the numerous previous studies and recommendations for the Kapa'a transportation system. Kapa'a Transportation Solutions identified those recommendations with a higher chance of implementation because they meet state and local goals and are feasible to fund and construct.

The northern boundary of the study area was Kapa'a Stream, and it did not include the Keālia area. The Kapa'a Transportation Solutions study area boundaries were:

- The intersection of Kūhiō Highway and Kapule Highway to the south
- Kapa'a Stream to the north
- Wailua Homesteads to the west
- The Pacific Ocean to the east

The Kapa'a Transportation Solutions project was developed to be consistent with the direction set forth in the *Federal-Aid Highways 2035 Transportation Plan for the District of Kaua'i* which had recently been updated in 2014. While that document provided the policy basis for land transportation decisions, the Kapa'a Transportation Solutions represented a finer grain look at specific recommendations for the Kapa'a subarea. It focused on projects that could be implemented in less than 20 years.

The *Kapa'a Transportation Solutions* report was released in August 2015. The report included a list of priority improvements. Several of the top priority recommendations are currently funded and are planned for implementation.

- ***Intersection improvements at Kūhiō Highway at Mailihuna Road.*** The existing three-legged intersection on Mailihuna Road would be reconfigured to improve safety by constructing a roundabout.
- ***Widening the Temporary Kapa'a Bypass Road north of Olohena Road.*** The addition of one travel lane in the northbound direction will provide drivers with an alternate northbound connection from downtown Kapa'a to the north.
- ***Widening Kūhiō Highway between the Temporary Kapa'a Bypass Road (southern terminus) and Kuamoo Road.*** By adding one southbound lane to the highway, this project would improve capacity and improve intersection operations at Haleilio Road and Kuamoo Road.

Discussion: The TIAR (Appendix H) and Section 4.11 (Roadways and Transportation) of the DEIS evaluated existing and future traffic conditions at major intersections in Kapa'a to assess the impact of the Proposed Action. The TIAR assumed that the three projects listed above would be completed

by Year 2027, the selected “base year” for analysis, representing when the Keālia Mauka subdivision is likely to be completed and occupied. The TIAR recommended signalization at the Kūhiō Highway and Keālia Road intersection to mitigate traffic impacts associated with the Proposed Action. No other roadway or intersection mitigation is recommended.

5.3.3 Bike Plan Hawai‘i

Bike Plan Hawai‘i, prepared by the State of Hawai‘i Department of Transportation (HDOT, 2003), is the State’s bicycling master plan. This plan serves as a blueprint to improve conditions for bicyclists throughout the state, and seeks to encourage new users. *Bike Plan Hawai‘i* includes an inventory of existing bicycling facilities, identification and prioritization of proposed bicycle facility improvements, and strategies for implementing these projects. Bikeway proposals were categorized into four priority levels: Priority I projects less than 10 years to completion; Priority II less than 20 years; Priority III more than 20 years; and Priority IV being those projects whose timetable is contingent to new road construction or widening.

At the time *Bike Plan Hawai‘i* was prepared, the island of Kaua‘i had 25.6 miles of bike facilities existing and underway, and 261 miles proposed. Several sections of Ke Ala Hele Makalae were identified as near-term (Priority I) recommendations for Kaua‘i.

Discussion: As discussed in Chapter 4 and the Traffic Impact Analysis Report (Appendix H), Ke Ala Hele Makalae multi-use path provides pedestrian and bicycle access through Kapa‘a and Keālia. The TIAR noted minimal, if any bicycle activity along Kūhiō Highway near the Petition Area. A total of 20 bicycle routes/upgrade are proposed for the Kawaihau region of East Kaua‘i. In the vicinity of the Petition Area, these include signed shared road designations on Kūhiō Highway and Keālia Road. *Bike Plan Hawai‘i* identifies these proposed facilities as:

- Kūhiō Highway (Keālia to Anahola)—Signed Shared Road, Priority Level II
- Kūhiō Highway (Wailua to Keālia)—Signed Shared Road, Priority Level II
- Keālia Road (Koolau to Kūhiō Highway)—Signed Shared Road, Priority Level III

The Priority Level II improvements to Kūhiō Highway will enhance the condition of bicycling infrastructure in the vicinity of the Petition Area. Improvements to Keālia Road, as Priority III, are still at least 10 or more years out from present, and will have no impact on the Proposed Action.

5.3.4 Statewide Pedestrian Master Plan

The HDOT’s *Statewide Pedestrian Master Plan* (HDOT, 2013) is intended to address pedestrian safety as a component of the HDOT mission to provide a safe, efficient, and accessible highway system. The Plan envisions a multi-modal transportation system that provides a safe and well-connected pedestrian network that encourages walking among all ages and abilities. The intent is to promote a positive pedestrian experience, environmental, economic and social sustainability, while also fostering healthy lifestyles and energy conservation.

The goals of the *Statewide Pedestrian Master Plan* are:

1. Improve pedestrian mobility and accessibility
2. Improve pedestrian safety

3. Improve connectivity of the pedestrian network
4. Promote environmental benefits of walking
5. Encourage walking to foster healthy lifestyles
6. Enhance communities and economic development by creating pedestrian-oriented areas and positive pedestrian experiences
7. Promote and support walking as an important transportation mode that reduces overall energy use

The *Statewide Pedestrian Master Plan* indicated that the County of Kauaʻi had relatively few crashes involving pedestrians. The crashes that have occurred have typically clustered in town centers, near pedestrian attractors. The majority of crashes that have occurred have involved pedestrians under the age of 17 (HDOT, 2013). Maps show that in the general Petition Area, there are no sidewalks along Kūhiō Highway for most of the route between Kapaʻa and Keālia. Near the Closer to Keālia Road intersection, there are sidewalks on one side of the highway.

The Statewide Pedestrian Master Plan developed an inventory of the existing pedestrian environment and identified areas of concern. The key factors for determining the areas of concern were locations where there are gaps in the pedestrian system; high concentrations of pedestrian-oriented populations; pedestrian hot spots (crashes); and pedestrian attractors such as schools, shopping centers, employment centers, etc. Six areas of concern were identified for Kauaʻi County. The closest to the Petition area is the intersection of Kūhiō Highway and Kawaihau Road, where three roads from the *mauka* side (Cane Haul Road, Hauaala Road and Kawaihau Road) intersect the highway within a 250-foot stretch. Pedestrians from the residential neighborhood in the area have a difficult time crossing the highway to access the multi-use path on the *makai* side of the road.

Discussion: Pedestrian traffic along Kūhiō Highway between Keālia Road and Kapaʻa is negligible, largely due to the lack of sidewalks. Pedestrian traffic around the Kūhiō Highway-Keālia Road intersection is associated with individuals using the nearby bus stops and accessing coastal recreation areas, including the multi-use path. Proposed signalization at Kūhiō Highway and Keālia Road will include sidewalks at this intersection. The signal will improve crossing safety for bus riders and pedestrians.

There is virtually no pedestrian traffic along Keālia Road between Kūhiō Highway and the Petition Area. While the Proposed Action may result in some additional pedestrian traffic, the narrow width and curves of Keālia Road, the lack of sidewalks and road shoulders, and the incline make this road uninviting for pedestrians, and especially unsafe for children.

Within the proposed Keālia Mauka subdivision, there is likely to be some pedestrian traffic as residents visit neighbors or walk to the future park area. Installation of a traffic signal at the intersection of Keālia Road and Kūhiō Highway will improve pedestrian safety and access across Kūhiō Highway.

5.3.5 Kauaʻi Multimodal Land Transportation Plan

The *Kauai Multimodal Land Transportation Plan* (MLTP) is guided by the 2000 County General Plan and outlines steps the County will need to take to achieve a balanced multimodal transportation system by the year 2035. The MLTP serves as the plan for county roads and streets, public transit,

bicycle facilities, pedestrian facilities, agricultural needs, and as a means to integrate land use planning with transportation system development.

The MLTP identifies its most pressing challenge as accommodating a growing population on Kaua'i while preserving the rural character and high quality of life. The MLTP identified as "Preferred Scenario" to prevent growth in island-wide vehicle miles of travel above the 2010 level, despite an anticipated increase in the resident and visitor population. Accomplishing the preferred scenario will require a gradual shift in some of the drive-alone trips that dominate island travel today to other modes of transportation such as walking, biking and transit (Charlier Associates, Inc. 2012).

Discussion: As discussed in Chapter 4 (Section 4.11), sustainable transportation infrastructure in the vicinity of the Petition Area is currently fair to poor. There are no sidewalks along Kūhiō Highway near Keālia Road connecting to Kapa'a Town. The Kaua'i Bus provides service along Kūhiō Highway and there is an existing stop near Keālia Road. Although bus routes connect to downtown Kapa'a, there is no direct bus access to Kapa'a High School or Kapa'a Middle School, two likely destinations for prospective bus riders from a new residential subdivision.

The Proposed Action will provide a traffic signal at the Kūhiō Highway/Keālia Road intersection to mitigate project related traffic impacts. This will include the addition of a sidewalk. For pedestrians in the vicinity, traffic safety would be improved and access to the *makai* side of the highway and down to the coastal areas would be facilitated. The County also has long term plans to modify bus routes to improve access from Keālia Road to the middle and high schools.

Ke Ala Hele Makalae multi-use path along the coast is an existing amenity that is popular for walking, jogging, bike riding. It also provides a multi-modal transportation option, and could be used to get to Kapa'a. *Bike Plan Hawai'i* also designates this area of Kūhiō Highway a signed-shared road.

Although non-vehicle options from the Kūhiō Highway and Keālia Road intersection are expected to improve over the next few years, for Keālia Mauka residents, the major constraint will continue to be the poor connectivity between the subdivision and Kūhiō Highway. As discussed above, Keālia Road is steep and narrow with no shoulders or sidewalks, and no space to add them, and is not conducive to bicycling or walking.

5.4 CHAPTER 343 SIGNIFICANCE CRITERIA

In determining whether an action may have a significant impact on the environment, agencies and applicants are tasked to consider the sum of effects on the quality of the environment, and evaluate the overall and cumulative effects of the action. In most instances, an action shall be determined to have a significant effect on the environment if it meets any of the following criteria (from Section 11-200-12, HAR):

1. Involves an irrevocable commitment to loss or destruction of any natural or cultural resource;
2. Curtails the range of beneficial uses of the environment;
3. Conflicts with the state's long-term environmental policies or goals and guidelines as expressed in [Chapter] 344, HRS, and any revisions thereof and amendments thereto, court decisions, or executive orders;

4. Substantially affects the economic or social welfare of the community or State;
5. Substantially affects public health;
6. Involves substantial secondary impacts, such as population changes or effects on public facilities;
7. Involves a substantial degradation of environmental quality;
8. Is individually limited but cumulatively has considerable effect upon the environment or involves a commitment for larger actions;
9. Substantially affects a rare, threatened, or endangered species, or its habitat;
10. Detrimentally affects air or water quality or ambient noise levels;
11. Affects or is likely to suffer damage by being located in an environmentally sensitive area such as a flood plain, tsunami zone, beach, erosion-prone area, geologically hazardous land, estuary, fresh water or coastal waters;
12. Substantially affects scenic vistas and view planes identified in county or state plans or studies; or,
13. Requires substantial energy consumption.

Discussion: The State Land Use Commission (LUC), as the Accepting Agency, has determined that the Proposed Action meets two significance criteria defined in HAR §11-200. The Proposed Action has the potential to curtail the range of beneficial uses of the environment (Criterion 2) and may involve substantial secondary impacts on public transportation facilities (roadways) (Criterion 6). Therefore, the LUC has determined that the Proposed Action requires the preparation of an Environmental Impact Statement (EIS) versus an Environmental Assessment, and has elected to have the Petitioner move forward with the preparation of the EIS.

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