Waikapū Country Town

Sustainability Plan

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EXHIBIT "23"

WAIKAPŪ COUNTRY TOWN

SUSTAINABILITY PLAN

Facilitate the sustainable development and operations of the Waikapū Country Town, Waikapū, Maui

INTRODUCTION

The Waikapū Country Town ***Sustainability Plan*** is intended to serve as one of the implementing tools that will direct the long-term development and operations of the Waikapū Country Town, Wailuku, Maui.

Sustainable development has been defined in many ways, but it most commonly referred to as *"development that meets the needs of the present without compromising the ability of future generations to meet their own needs."*[1] The goal of promoting sustainable development in Hawai'i and Maui County is well established through State and County land use and environmental policy. Act 181, 211 Session Laws of Hawai'i, establishes sustainability as a State priority by incorporating the Hawai'i 2050 Sustainability Plan definitions, guiding principles and goals into HRS §226-108. Table 1 identifies the guiding principles contained in HRS §226-108 and those that the Waikapū Country Town's Sustainability Plan are supportive of.

Table 1. Consistency with §226-108 Sustainability Guiding Principles

WCT Sustainability Plan is Supportive	**§226-108 Sustainability Guiding Principles**
✓	*Encouraging balanced economic, social, community, and environmental priorities;*
✓	*Encouraging planning that respects and promotes living within the natural resources and limits of the State;*
✓	*Promoting a diversified and dynamic economy;*
✓	*Encouraging respect for the host culture;*
✓	*Promoting decisions based on meeting the needs of the present without compromising the needs of future generations;*
✓	*Considering the principles of the ahupua'a system; and*
✓	*Emphasizing that everyone, including individuals, families, communities, businesses, and government, has the responsibility for achieving a sustainable Hawai'i.*

[1] Brundtland Report, 1987

The County of Maui in its General and Community Planning documents also establishes policies to facilitate sustainable development. As documented in Chapter III of the Project's FEIS, *pages III-1 through III-4*, the primary mission of the WCT is to create a community that embodies and respects the guiding principles that the Maui Island Plan (MIP), December 2012, embraced to identify its urban growth boundaries.[2] These guiding principles express the principles of sustainable development. Table 2 identifies the MIP's guiding land use principles and those that the Waikapū Country Town's Sustainability Plan are supportive of.

Table 2. Consistency with MIP guiding land use principles

WCT Sustainability Plan is Supportive	**§226-108 Sustainability Guiding Principles**
✓	*Respect and encourage island lifestyles, cultures, and Hawaiian traditions;*
✓	*Promote sustainable land use planning and livable communities;*
✓	*Keep "urban-urban" and keep "country-country";*
✓	*Protect traditional small towns;*
✓	*Protect open space and working agricultural landscapes;*
✓	*Protect environmentally sensitive lands and natural resources;*
✓	*Promote equitable development that meets the needs of each community;*
✓	*Plan for and provide efficient and effective public facilities and infrastructure;*
✓	*Support sustainable economic development and the needs of small business; and*
✓	*Promote community responsibility, empowerment, and uniqueness.*

The MIP designated the project site as a "Planned Growth Area" and placed the Project's proposed urban and rural development within a Small Town Growth Boundary. Through 2030, the MIP proposes that the island's population and employment growth be directed to lands within urban, small town and rural growth boundaries.

[2] Maui Island Plan, December 2012, pages 8-9 through 8-10.

WCT DESIGN PHILOSOPHY

The WCT ownership understands the unique opportunity and responsibility that is integral of any land development on Maui. Development in Hawai'i needs to be respectful of the history, geography, culture and economy of the islands to be successful and in order to best serve the needs of the community. The principal philosophy that has driven the Project's urban design is the desire to create a "complete" community that reflects the MIP's guiding land use principles, which will ensure the ultimate success of the Project.

The WCT's Sustainability Plan will serve as one important tool that will be used by the Project planners, future developers and governmental regulators to ensure the successful implementation of the WCT. WCT's Sustainability Goals and Objectives are identified in Table 3 and focus around the following: Urban Design, Energy Use, Water Use, Storm Drainage, Waste Management, Agricultural Development and Local Food Production, and Health and Wellness.

Table 3: WCT Sustainability Goals and Objectives

URBAN DESIGN	
UD.1	**Goal:** Establish a more complete community that balances housing with the provision of on-site supporting commercial, civic and employment uses.
ENERGY USE	
EU.1	**Goal**: Reduce WCTs demand for carbon-based fuels
EU.2.A	**Objective:** Reduce energy use in residential, commercial and institutional buildings by 30% to 50% or more from baseline levels
EU.3.B	**Objective:** Facilitate carbon storage and sequestration with additional forest and tree coverage
EU.4.C	**Objective:** Develop renewable energy sources to offset at least 40 percent of the Project's electrical energy demand
WATER USE	
WU.1	**Goal:** Significantly reduce the Project's potable and non-potable water demand

WU.1.A	**Objective:** Reduce the overall Project demand for potable water use by 30 to 50 percent
STORM DRAINAGE	
SD.1	**Goal**: Convert storm water runoff into an economic and environmental resource
SD.1.A	**Objective:** Remove pollutants and facilitate ground water recharge
SD.2.A	**Objective:** Prevent runoff and pollutants from being discharged from construction sites
WASTE MANAGEMENT	
WM.1	**Goal:** Reduce the volume of Project waste from entering landfills during construction and operations
AGRICULTURE DEVELOPMENT & LOCAL FOOD PRODUCTION	
AD.1	**Goal:** Create and maintain economically viable agricultural production on WCT agricultural lands
AD.2	**Goal:** Protect the environment and neighboring residences from potential nuisance impacts and environmental and community health impacts that may be associated with agricultural operations.
HEALTH & WELLNESS	
HW.1	**Goal:** Establish a community that promotes health and wellness

The WCT's Sustainability Plan Goals and Objectives are to be implemented through the strategies and actions that are identified in Table 4. Working together, the Project's sustainability goals, strategies and actions will facilitate environmental, cultural and economic sustainability by mitigating development impacts to the island's natural and cultural resources, while making more efficient use of scarce resources.

Table 4: WCT Sustainability Goals, Objectives, Strategies and Implementation Program

WCT SUSTAINABILITY PLAN GOALS, OBJECTIVES, STRATEGIES AND IMPLEMENTATION URBAN DESIGN		
UD.1	**Goal:** Establish a more complete community that balances housing with the provision of on-site supporting commercial, civic and employment uses.	
Strategies:		
UD.1.a	Integrate a balanced mix of residential, commercial, employment, and civic uses into the development.	
UD.1.b	Incorporate compact and mixed use development patterns.	
UD.1.c	Provide a diversity of housing choices for low, moderate and high income wage earners.	
UD.1.d	Build "Complete Streets".	
UD.1.e	Establish a diverse range of active and passive recreation opportunities.	
UD.1.f	Encourage community gardening within designated areas.	
UD.1.g	Integrate off-road pedestrian and bicycle paths and trails.	
UD.1.h	Ensure efficient vehicular and non-motorized connectivity between residential, commercial and civic uses.	
UD.1.i	Incorporate adequate transmit stops throughout the development.	
UD.1.j	Meet all ADA standards for accessibility.	
IMPLEMENTATION DISCUSSION		
UD.1.a	***Integrate Balanced Mix of Uses***. As documented in Chapter III of the FEIS, *pages III-6 through III-24 and pages III-50 through III-54*, the Project will be developed with a mix of residential housing types, commercial uses, employment uses, parks and schools. The housing mix will include for sale and rental housing in a variety of configurations including multi-family, single-family, and rural lots. The density of the residential development, unit sizes and materials will target a diversity of income categories. Commercial, employment, civic and recreational uses will help make the	**References** FEIS, Chapter III; WCT Site Plan

WCT SUSTAINABILITY PLAN GOALS, OBJECTIVES, STRATEGIES AND IMPLEMENTATION		
	community more self-sufficient thereby creating greater convenience for residents and reducing the need for vehicular trips. The anticipated development mix includes: • 1,433 residential units of which approximately 25% may be multi-family. The balance of residential units may be developed in a variety of lot sizes and configurations that may range from approximately 2,500 square feet to one-half acre or more; • Up to 146 additional "Ohana" units to help address affordable housing demand; • Neighborhood scale commercial and employment space of approximately 198,847 square feet designed in a variety of formats and scales including live work and flex space; • Residential uses that may include small lot residential, R-O Lot Line, Duplex units, row houses, town homes, cottage residences, multi-family residences and large lot residential; • Active and passive park space of approximately 32.44 acres; • An elementary school on approximately 12 acres; • Approximately 1,077 acres of agricultural lands to be protected through an agricultural easement and a limit on future subdivision potential.	
UD.1.b	***Incorporate compact and mixed use development patterns.*** It is well established that compact and mixed-use development promotes walking and bicycling and reduces vehicular trips by making non-motorized transportation more convenient. The WCT is being developed in accordance with the approximate density guidelines established for the Project in the MIP. The MIP guidelines are approximately 9 to 12 units per net acre. The WCT development program expects the single-family net residential	**References** FEIS, Chapter III; Site Plan; Walkability Diagram

WCT SUSTAINABILITY PLAN GOALS, OBJECTIVES, STRATEGIES AND IMPLEMENTATION		
	density to be approximately 7.4 units per acre and the multi-family net residential density to be approximately 12.07 units per acre. As documented in the Site Plan and the Walkability Diagram in Chapter III of the FEIS, the Project's compact and mixed use development patterns facilitate active transportation.	
UD.1.c	***Diversity of housing choices for low, moderate and high income wage earners.*** As documented in Chapter III of the FEIS, the Project is anticipated to be developed with a diversity of housing types that may include small lot residential, R-O Lot Line, duplex units, row houses, town homes, cottage residences, "Ohana" units, multi-family residences and large lot residential. The types of permitted lot typologies and permitted densities will be defined in the Project's zoning ordinances and design guidelines. The purpose of the zoning ordinance and design guidelines is to create the framework, standards and regulatory review process whereby the Project will be implemented. In addition to promoting a diversity of housing types within the Project, the WCT will also be required to comply with the County's Residential Workforce Housing Policy (MCC Chapter 2.96), which currently requires from 20 to 25 percent of the Project's residential housing to be set aside for workforce housing. County Workforce Housing mandates regulated pricing and resale restrictions.	**References** FEIS, Chapters III and V.B.2
UD.1.d	***Build Complete Streets.*** "Complete" streets facilitate non-motorized transportation by incorporating traffic calming, sidewalks and bicycle infrastructure into the design of roadways. As documented in Chapter III of the FEIS, *pages III-25 through III-34,*	**References** FEIS, Chapter III; WCT Site Plan; Figures 21 and 22

WCT SUSTAINABILITY PLAN GOALS, OBJECTIVES, STRATEGIES AND IMPLEMENTATION		
	the WCT intends to promote walking and bicycling by incorporating a network off-street trails and bikeways within the development as well as by developing "complete" streets. The WCT is preparing a zoning ordinance and design guidelines that will detail "complete" street and trail typologies that will be incorporated within the development. The complete street and trail typologies will be subject to the review of the Department of Public Works, Maui Planning Commission and County Council. Figure 20 of the FEIS shows the WCT's street network. The Project's zoning ordinance and design guidelines will document "complete" street typologies for each street within the network.	of FEIS
UD.1.e	***Establish a diverse range of active and passive recreation opportunities.*** Chapter III.B.4 of the FEIS (*pages III-35 through III-37*) documents the WCT's plan for providing a diverse range of active and passive recreation opportunities. Park facilities are envisioned to include mini-parks, neighborhood parks, a community park and passive recreation facilities such as separated bike paths, pedestrian trails and areas where community gardening may be conducted. The proposed park facilities will be developed in accordance with the proposed phasing plan as documented in Chapter III.B.7 of the FEIS on *pages III-50 through III-54.*	**References** FEIS, Chapter III; WCT Site Plan; Figure 25 of FEIS
UD.1.f	***Encourage Community Gardening within Designated Areas.*** As documented in Chapter III.B.4 of the FIES (*page III-37*), the WCT may include opportunities for community gardening within its park system and in appropriate areas within the rural and agricultural lands. It is envisioned that small plots could be offered for lease and	**References** FEIS, Chapter III; WCT Site Plan; Figure 25 of FEIS

WCT SUSTAINABILITY PLAN GOALS, OBJECTIVES, STRATEGIES AND IMPLEMENTATION		
	that limited shared common facilities could be provided to community gardeners. The provision of community gardens will depend upon community demand for these types of facilities and whether adequate provisions can be made for the gardens security, provision of water, and on-going maintenance.	
UD.1.g	***Integrate off-road pedestrian and bicycle paths and trails.*** Developing pedestrian and bicycle paths and trails separated from vehicular traffic can create an environment that facilitates non-motorized transportation, which reduces CO2 emissions and promotes healthier lifestyles. As documented in Chapter III.3.B and C and III.B.4 of the FEIS, the WCT will have a network of pedestrian and bicycle paths and trails that will be incorporated into the development. Development of the off-road network will be implemented in accordance with the proposed phasing plan as documented in Chapter III.B.7 of the FEIS on *pages III-50 through III-54.*	**References** FEIS, Chapter III; WCT Site Plan; Figures 22 and 25 of the FEIS
UD.1.h and UD.1.i	***Ensure efficient vehicular and non-motorized connectivity between residential, commercial and civic uses.*** ***Incorporate adequate transmit stops throughout the development.*** The WCT motorized and non-motorized transportation plan is documented in Chapter III.3.a through f of the FEIS (*pages III-25 through 34*). The Plan includes strategies to develop a multi-modal transportation program to offer vehicular and non-motorized transportation between the various components of the Project. The Program includes creating a network of off-road pedestrian and bicycle facilities, developing	**References** FEIS, Chapter III.3.a through f o

WCT SUSTAINABILITY PLAN GOALS, OBJECTIVES, STRATEGIES AND IMPLEMENTATION		
	"complete" streets, incorporating transit infrastructure within the Project, and developing safe and convenient pedestrian crossings of the Honoapi'ilani Highway. Implementation of the transportation plan will be in accordance with the proposed phasing plan as documented in Chapter III.B.7 of the FEIS on *pages III-50 through III-54.*	
UD.1.j	***Meet all American Disabilities Act (ADA) standards for accessibility.*** The Project will comply with the requirements of the ADA to ensure that all required standards for accessibility are met. These requirements are addressed through the County's building permit process.	
URBAN DESIGN IMPLEMENTING ACTIONS		
TASK	**ACTION**	
UD.T.1	Prepare the Project's zoning ordinance and design guidelines in a manner that implements the Project's vision as described in Chapter III of the FEIS	
UD.T.2	Collaborate with the County agencies, including the Department of Public Works, Housing & Human Concerns, Department of Transportation, Department of Planning, and Department of Parks and Recreation throughout the implementation phase of the development	
UD.T.3	Establish CC&R's that ensure the proper maintenance of off-road pedestrian and bicycle facilities	
UD.T.4	Obtain Project District Phase II and III approvals through the Department of Planning to ensure urban design compliance with the WCT Master Plan	

WCT SUSTAINABILITY PLAN GOALS, OBJECTIVES, STRATEGIES AND IMPLEMENTATION ENERGY USE		
EU.1	**Goal**: Reduce WCTs demand for carbon-based fuels	
Strategies:		
EU.1.a	Incorporate compact and mixed use development patterns.	
EU.1.b	Build "Complete Streets".	
EU.1.c	Ensure efficient vehicular and non-motorized connectivity between residential, commercial and civic uses.	
EU.1.d	Incorporate adequate transit stops throughout the development.	
EU.1.e	Incorporate electric vehicle recharging stations within the development.	
EU.1.f	Support regional bicycle and pedestrian ways to connect the development with neighboring communities.	
IMPLEMENTATION DISCUSSION		
EU.1a - f	The WCT will reduce its demand for carbon-based transportation fuels by facilitating non-motorized transportation and reducing vehicular commuting distances through the implementation of smart growth planning principles, such as promoting compact mixed-use development and implementing both vehicular and non-motorized transportation programs. As documented in Chapter III.3.a through f of the FEIS (*pages III-25 through 34*), the Project's multi-modal transportation plan includes creating a network of off-road pedestrian and bicycle facilities, developing "complete" streets, incorporating transit infrastructure within the Project, and developing safe and convenient pedestrian crossings of the Honoapi'ilani Highway. Moreover, the Project's urban design promotes more compact and mixed use settlement patterns, which reduces vehicular and non-vehicular commuting	**References** FEIS, Chapter III.3.a through f

WCT SUSTAINABILITY PLAN GOALS, OBJECTIVES, STRATEGIES AND IMPLEMENTATION		
	distances. In response to strategy EU.1.e, the WCT currently offers three electric vehicle recharging stations within the area proposed for the Village Center. Additional vehicle recharging stations will be incorporated within the commercial and residential components of the Project to ensure the accessibility of charging stations to the public. In response to strategy EU.1.f, the WCT will coordinate with neighboring property owners, including the Waikapū Community Association, A&B Properties, and the County of Maui's Department of Parks and Recreation as well as the Mayor's Office, to identify opportunities to connect regional park, education, commercial and employment facilities by non-motorized transportation networks. Implementation of on-site transportation plan improvements will be in accordance with the proposed phasing plan as documented in Chapter III.B.7 of the FEIS on *pages III-50 through III-54*. Off-site planning to connect regional facilities through non-motorized transportation networks will require collaboration and cost-sharing between neighboring property owners. The Applicant will present a plan that documents a potential future regional non-motorized network that can help facilitate active transportation between neighboring land uses to the Maui Planning Commission as part of its presentation of the Project during the entitlement hearings.	
EU.2.A	**Objective:** Reduce energy use in residential, commercial and institutional buildings by 30% to 50% or more from baseline levels	

WCT SUSTAINABILITY PLAN GOALS, OBJECTIVES, STRATEGIES AND IMPLEMENTATION		
Strategies:		
EU.2.A.a	Promote energy efficiency as a key consideration in the design of new buildings.	
EU.2.A.b	Utilize an Integrated Design Process to determine the optimal mix of energy efficiency measures.	
EU.2.A.c	Establish a design team with expertise in the design of energy efficient residential, commercial and institutional buildings.	
EU.2.A.d	Utilize the following types of guides in the design of new buildings: ASHRAE Advanced Energy Design Guides for Small Office Buildings, for Small Retail Buildings, for K-12 School Buildings, etc.	
EU.2.A.e	Consider utilizing the Energy Star Certified Homes Prescriptive or Performance Path recommendations to achieve Energy Star certification for single- and multi-family residences.	
EU.2.A.f	Promote LEED certification of commercial and institutional buildings throughout the project.	
EU.2.A.g	Orientate buildings to take optimum advantage of natural cooling and ventilation.	
EU.2.A.h	Encourage the use of daylighting within new buildings.	
EU.2.A.i	Utilize LED lighting to the maximum extent possible for interior and exterior lighting.	
EU.2.A.j	Utilize canopy trees to provide shade and cooling of buildings.	
EU.2.A.k	Install solar hot water heating into all single-family homes.	
EU.2.A.l	Allow for laundry to be hang-dried in appropriate areas.	
IMPLEMENTATION DISCUSSION		
EU.2.A.a through l	The WCT's energy sustainability program is multi-faceted, with the goal of reducing the Project's demand for carbon based fuels through conservation and development of renewables. It is estimated that approximately 40 percent of energy demand and	

WCT SUSTAINABILITY PLAN GOALS, OBJECTIVES, STRATEGIES AND IMPLEMENTATION		
	carbon emissions are generated by residential and commercial buildings. The WCT will reduce its energy demand from commercial, residential and institutional buildings by implementing strategies EU.2.A.a through I, as well as by identifying and implementing other applicable energy conservation strategies. The buildout of the WCT will occur through the implementation of the Project's zoning ordinance and its Design Guidelines as well as by complying with other applicable standards prescribed in State and County ordinances. The WCT's Design Guidelines will include a chapter that documents best practices for energy efficiency in the design and construction of new buildings. It is envisioned that the Design Guidelines will also include checklists that builders will be required to complete that documents their compliance with the WCT's strategies for reducing energy demand in the construction and operation of new buildings.	
EU.3.B	**Objective:** Facilitate carbon storage and sequestration with additional forest and tree coverage	
Strategies:		
EU.3.B.a	Create an Urban Tree Canopy by planting shade trees in the following types of areas: along residential and collector streets, within parking lots, within passive and active recreation areas, and as landscape features within residential, commercial and institutional lots.	
EU.3.B.b	Consider participation in Federal and State reforestation programs such as the State of Hawai'i Forest Stewardship Program (FSP) and the Conservation Reserve Enhancement Program (CREP).	
IMPLEMENTATION DISCUSSION		

WCT SUSTAINABILITY PLAN GOALS, OBJECTIVES, STRATEGIES AND IMPLEMENTATION		
EU.3.B.a through b	The buildout of the WCT will occur through the implementation of the Project's zoning ordinance and its Design Guidelines as well as other applicable land use and development standards prescribed in State and County ordinances. The WCT's design guidelines will include a section that documents best practices for Landscape Planting of canopy trees in accordance with strategy UE.3.B.b. As the Applicant, and other potential developers, design and permit their projects they will be required to demonstrate compliance with the Project's Design Guidelines for landscape planting. The County of Maui generally requires the submittal of a Landscape Planting Plan (LPAP) to ensure compliance with the County's landscape planting requirements. In response to Strategy EU3B.b, there are portions of the WCT's agricultural lands that may be suitable for reforestation and other activities consistent with the State DLNR's CREP program. In particular, the agricultural lands that are abutting the Waikapū Stream and that reach to the base of the West Maui Mountains. According to the CREP website, CREP projects are intended to restore riparian forest buffers, wetland buffers, and other reforestation sites by planting native vegetation and controlling invasive species. The primary goals of CREP projects are to enhance wildlife habitat and control invasive species, as well as improve water quality and quantity, increase groundwater recharge, improve near shore coral reef health and diversity by filtering agricultural runoff and increasing water condensation in the uplands.	

WCT SUSTAINABILITY PLAN GOALS, OBJECTIVES, STRATEGIES AND IMPLEMENTATION		
	The Applicant will meet with DLNR officials to assess the opportunity to implement CREP projects on WCT lands. The CREP program is designed to provide cost sharing to achieve the State's conservation objectives, which may provide a mutually beneficial outcome for the State and the Project.	
EU.4.C	**Objective:** Develop renewable energy sources to offset at least 40 percent of the Project's electrical energy demand	
EU.4.C.a	Incorporate PV and battery storage systems as options for potential homebuyers.	
EU.4.C.b	If technically and financially viable, develop on-site solar, wind and hydro resources.	
EU.4.C.c	Consider farming and/or leasing agricultural lands for viable bio-fuel crops.	
EU.4.C.d	Assess the viability of storing energy on-site for direct sale to WCT customers if connecting to the MECO grid is not available.	
IMPLEMENTATION DISCUSSION		
EU4.C.a through d	As noted in Chapter V.D.2 of the FEIS (*pages V-96-97*), the WCT intends to promote the use of renewable energy in order to reduce the Project's energy costs, while also reducing its CO2 emissions. The installation of photovoltaic systems will be encouraged on residential and commercial buildings. If forty percent of residential and commercial buildings install photovoltaic systems (generating approximately 11.9 GWh per year), demand for carbon-based fuels could be reduced by roughly 50 percent. Moreover, the WCT desires to install a limited number of solar farms in appropriate locations within the agricultural lands. If two solar farms of approximately 5-acres (0.75 MW each) each are developed, the electricity generated would be about 2.6 GWh per year, which could service approximately 236 residential units. Thus, the WCT	**References** FEIS, Chapter III.B.5 and V.D.2

WCT SUSTAINABILITY PLAN GOALS, OBJECTIVES, STRATEGIES AND IMPLEMENTATION		
	could potentially generate about 70 percent of its energy consumption through renewables. In addition to developing on-site solar power, the WCT will consider leasing agricultural lands to farmers interested in growing energy crops. The WCT is currently leasing some of its Agricultural Preserve lands to Pacific Biodiesel for the purpose of growing bio-fuel crops, which reduces the County's reliance upon imported fossil fuels and may reduce CO2 emissions. The implementation of on-site renewable energy development will be driven my consumer demand and the technical, regulatory and financial viability of the individual projects at the time the WCT is being developed.	
ENERGY USE IMPLEMENTING ACTIONS		
TASK	**ACTION**	
EU.T.1	Prepare Project's zoning ordinance and design guidelines in a manner that implements the Project's vision as described in Chapter III of the FEIS	
EU.T.2	Coordinate with the County's Department of Transportation to identify suitable areas within the WCT for transit stops	
EU.T.3	Conduct coordination meetings to integrate motorized and non-motorized connectivity between neighboring land uses including schools, parks, commercial and employment areas	
EU.T.4	Prepare a conceptual plan that identifies potential feasible motorized and non-motorized connectivity between neighboring land uses	
EU.T.5	Incorporate into the Project's Design Guidelines best practices for the design of energy conserving residential, commercial and institutional buildings that addresses	

WCT SUSTAINABILITY PLAN GOALS, OBJECTIVES, STRATEGIES AND IMPLEMENTATION	
	strategies EU.2.A.a through l; incorporate a checklist for architects and developers to complete that documents compliance with best practice
EU.T.5	Incorporate into the design guidelines reference information on LEED Certification for Building Design and Construction, Interior Design and Construction, Building Operations and Maintenance, Neighborhood Development and Homes
EU.T.6	Coordinate with Maui Electric Company, JUMP Start Maui, and the Mayor's office to identify opportunities for incorporating "smart grid" technologies and other opportunities to facilitate energy conservation
EU.T.7	Incorporate Conceptual Landscape Planting Plan standards and best practices into the Project's zoning ordinance and design guidelines to implement strategy EU.3.B.a
EU.T.8	Engage with the DLNR's CREP program to assess the opportunity and desirability of the WCT's participation in the program
EU.T.9	Develop a WCT renewable energy development program in association with State and County agencies and MECO that includes: 1) the development of solar on future commercial, residential and institutional buildings; 2) development of solar farms and other suitable renewable energy systems within the Project's Agricultural District pursuant to State land use law permitting requirements; and 3) implementation of battery storage, and smart grid technologies. Implementation of the plan will be dependent upon consumer demand, financial, technological and regulatory feasibility.
WATER USE	
WU.1	**Goal:** Significantly reduce the project's potable and non-potable water demand
WU.1.A	**Objective:** Reduce the overall project demand for potable water use by 30 to 50 percent
Strategies:	

WCT SUSTAINABILITY PLAN GOALS, OBJECTIVES, STRATEGIES AND IMPLEMENTATION		
WU.1.A.a	Utilize low flow fixtures that exceed baseline standards established by the 2006 Uniform Plumbing Code by at least 20%.	
WU.1.A.b	Utilize non-potable water for irrigation of common open spaces, parks, etc.	
WU.1.A.c	Establish dual water systems to provide non-potable water for irrigation of parks and open space, residential and commercial landscape planting.	
WU.1.A.d	Allow for rainwater catchment throughout the project.	
WU.1.A.e	Utilize non-potable water reservoirs to store, capture, and manage the supply of non-potable water.	
WU.1.A.f	Study the practicality of rainwater harvesting including the capture and storage of runoff for irrigation.	
WU.1.A.g	Utilize draught tolerant plants, appropriate for the climate zone, throughout the project.	
WU.1.A.h	Utilize drip irrigation and water conserving sprinkler systems.	
IMPLEMENTATION DISCUSSION		
WU.1.A.a through h	A central sustainability goal of the WCT is to conserve potable and non-potable water resources through implementation of the Project's sustainability strategies WU.1A.a through h. As documented in Chapter V.D.4 of the FEIS, the primary means of mitigating the Project's demand for potable water resources includes: • Developing a dual water system where potable well water will be used for potable uses and non-potable well water will be used for irrigation of parks, open space and the landscape planting of residential and commercial lots. • Recycling wastewater treated at the Project's wastewater reclamation facility so that it can be used for irrigation of	**References** FEIS, Chapter V.D.4

WCT SUSTAINABILITY PLAN GOALS, OBJECTIVES, STRATEGIES AND IMPLEMENTATION		
	the Project's agricultural lands and/or urban park and open space lands. • Incorporating water conserving low flow fixtures throughout the development, including low flow faucets, toilets and showers. • Utilizing professionally designed landscape irrigation systems that utilize drip irrigation and low flow spray heads in accordance with best practice for conserving water in landscape irrigation. The above-referenced water conserving strategies related to the reuse of wastewater and development of the dual water system will be implemented in accordance with the proposed infrastructure phasing plan as documented in Chapter III.B.7 of the FEIS on *pages III-50 through III-54*. Other important strategies, such as the use of low flow fixtures, utilization of draught tolerant plants, installation of water conserving irrigation systems, and the opportunity for use of individual water catchment systems, etc., will be implemented as WCT projects are developed. These projects will be subject to compliance with the Project's zoning ordinance, Design Guidelines and other applicable State and County requirements. The Project's Design Guidelines will incorporate the WCT's Sustainability Plan by reference, and provisions related to water conservation will be included in the Design Guidelines with the inclusion of a checklist that developers shall complete to demonstrate compliance with the Sustainability	

WCT SUSTAINABILITY PLAN GOALS, OBJECTIVES, STRATEGIES AND IMPLEMENTATION		
	Plan. In response to strategies WU.1.A.e and f, the WCT will be using retention basins throughout the Project area to capture and retain runoff from the Project site. These basins will serve the dual purpose of retaining runoff on-site while also allowing the subject runoff to percolate into the soils and recharge the ground water aquifer. However, there may also be opportunities to further treat the Project's stormwater runoff so that it may be recycled for irrigation use. The development of bioretention basins can be effective in achieving this result. The WCT is working with its civil engineer to determine if bioretention basins are a technically and cost-effective means of capturing, storing, treating, and recycling stormwater so that it can be used as one component of the Project's water conservation and stormwater management program. However, implementation of these strategies will be subject to a cost, regulatory, and technological assessment to ensure that implementation is practical for future homebuyers and businesses.	
WATER USE IMPLEMENTING ACTIONS		
TASK	**ACTION**	
WU.T.1	Incorporate water conservation standards and best practices into the applicable sections of the Project's zoning ordinance and design guidelines to implement strategies WU.1.A.d, g and h	
WU.T.2	Develop a dual water system that transmits the Project's non-potable water for	

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	irrigation and potable water for potable uses.
WU.T.3	Recycle the Project's wastewater for irrigation uses
WU.T.4	Assess the regulatory, fiscal and technical feasibility of recycling storm water through bio-retention, and other similar approaches, in order to expand the supply of non-potable irrigation water
STORM DRAINAGE	
SD.1	**Goal**: Convert storm water runoff into an economic and environmental resource
SD.1.A	**Objective:** Remove pollutants and facilitate ground water recharge
Strategies:	
SD.1.A.a	Utilize a combination of structural and non-structural BMPs in a sequence to enhance treatment of runoff.
SD.1.A.b	Utilize Low Impact Development Techniques such as bioretention, grassed swales, level spreaders, vegetative filter strips, natural buffers and open space to reduce runoff volumes, promote infiltration, and remove pollutants.
SD.1.A.c	Assess the following types of structural systems to treat runoff, facilitate groundwater recharge, and contain any increase in runoff to the site: wet-ponds, infiltration basins, infiltration trenches, French drains, exfiltration trenches, etc.
SD.1.A.d	Promote the use, where practical, of grassed parking and permeable pavements for residential driveways, commercial and non-commercial parking lots and in other areas where appropriate.
SD.1.A.e	Establish a riparian buffer along the Waikapū Stream.
SD.1.A.f	Utilize catch basin inserts and/or oil/grit separators to remove oil, grease, trash and other pollutants from runoff.
IMPLEMENTATION DISCUSSION	

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SD.1.A.a through f	As documented in Chapter V.D.3 of the FEIS, the WCT will retain the entire increase in runoff generated by the Project through the use of on-site retention basins. Chapter V.D.3 of the FEIS, *pages V-97 – V-105*, documents the Project's preliminary drainage program, which includes the use of grass swales and retention basins. The Implementation of the on-site drainage improvements will be in accordance with the proposed infrastructure phasing plan as documented in Chapter III.B.7 of the FEIS on *pages III-50 through III-54*. The WCT will also assess the feasibility / practicality of implementing other Low Impact Development techniques, such as those identified by strategies SD.1.A.b through c, which may provide the opportunity for increased natural treatment of stormwater and its reuse. However, such measures will need to be viable from a regulatory, cost and technical perspective. Regarding strategy SD.1.A.e, a minimum 100-foot riparian buffer will be established along the southern boundary of the Waikapū Stream and will be maintained as open space as shown on the Project's site plan. Regarding strategy SD.1.A.f, catch basin inserts and oil/grit separators will be installed at various locations within the collection system and maintained in accordance with prescribed standards.	**References** FEIS, Chapter III and Chapter V.D.3
SD.2.A	**Objective:** Prevent runoff and pollutants from being discharged from construction	

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	sites	
SD.2.A.a	During the construction phase, utilize a combination of construction phase BMP's such as: • Silt fences; • Dust screens; • Seeding/sodding/mulching; • Covering exposed dirt; • Regular watering; and • Earthen berms.	
SD.2.A.b	Obtain a National Pollutant Discharge Elimination System (NPDES) permit for areas of grading that are larger than one acre.	
IMPLEMENTATION DISCUSSION		
SD.2.A.a through b	The Implementation of on-site construction phase BMP's to control stormwater runoff will help to prevent erosion and sedimentation during the Project's construction phase. Chapter V.D.3 of the FEIS, *page V-105,* documents the types of construction phase BMP's that are typically used to mitigate construction stormwater runoff impacts. The construction phase BMP's will be documented during both the NPDES permitting process and upon submittal of building and grading permits as projects are proposed.	**Reference** FEIS, Chapter V.D.3
STORM DRAINAGE IMPLEMENTING ACTIONS		
TASK	**ACTION**	
SD.T.1	Implement the Project's Preliminary Drainage program as conceptually described in Chapter V.D.3 of the FEIS	

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SD.T.2	Incorporate on-site drainage best practice standards into the applicable sections of the Project's zoning ordinance and design guidelines to implement strategies d and f	
SD.T.3	Assess the regulatory, fiscal and technical feasibility of incorporating Low Impact Development (LID) drainage mitigation techniques, such as those listed in strategies SD.1.A.b and c into the on-site drainage program	
SD.T.3	Establish and maintain a 100-foot riparian buffer along the Waikapū Stream	
SD.T.4	Incorporate construction phase BMP's into the applicable sections of the Project's zoning ordinance and design guidelines to implement strategy SD.2.A.a	
SD.T.5	Comply with NPDES permitting requirements	
WASTE MANAGEMENT		
WM.1	**Goal:** Reduce the volume of project waste from entering landfills during construction and operations	
Strategies:		
WM.1.a	Develop a construction waste management policy and program for the construction phase.	
WM.1.b	Establish a recycling program for residential, commercial and institutional users.	
WM.1.c	Locate a material recycling collection center within the project.	
WM.1.d	Assess the feasibility of establishing an on-site composting program for organic materials.	
WM.1.e	Assess the feasibility of instituting a bi-annual durable goods collection drive.	
IMPLEMENTATION DISCUSSION		
WM.1a	Reducing waste during the construction and operation phases of	

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through e	the WCT is an important sustainability goal of the Project. During the construction phase, a construction phase waste management policy and program will be utilized to reduce waste and increase recyclable materials. Prior to initiating buildout of the Project, the construction phase waste management program will be developed and it will be used by on-site contractors. During the operation phase, WCT will seek to reduce its waste generation through implementation of strategies WM.1.b, c, d and e. The location of potential material recycling and composting collection centers will be identified in the zoning ordinance and potential sites will be designated on the site plan and presented to the Maui Planning Commission and County Council during the entitlement process. The WCT will work closely with the County's solid waste division to ensure the Project's participation in the County's solid waste materials recycling programs and it will distribute waste management and recycling educational materials provided by the County to residents of the Project.	
WASTE MANAGEMENT IMPLEMENTING ACTIONS		
TASK	**ACTION**	
WM.T.1	Identify potentially suitable areas within the Project boundaries for a recycling and composting center to service the Project	
WM.T.2	Develop a construction phase waste management and recycling program in association with the County's Department of Solid Waste Management	
WM.T.3	Coordinate with the County's Department of Environmental Management to	

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	disseminate literature to Project residents on recycling best practices and to participate in County recycling programs	
AGRICULTURE DEVELOPMENT & LOCAL FOOD PRODUCTION		
AD.1	**Goal:** Create and maintain economically viable agricultural production on WCT agricultural lands	
Strategies:		
AD.1.a	Protect in perpetuity approximately 800 acres of prime agricultural lands from urban development through an agricultural easement or similar mechanism and limit future subdivision to approximately 5 lots for the remaining lands.	
AD.1.b	Establish a public and/or private agricultural park within a portion of the Project's agricultural lands.	
AD.1.c	Provide opportunities for community gardening within the proposed parks and/or open space network	
AD.1.d	Encourage the establishment of a farmers market, farm stands, and community supported agricultural programs within the WCT.	
IMPLEMENTATION DISCUSSION		
AD.1.a through d	The WCT is a unique development concept in Hawai'i because of its master planning of urban, rural and agricultural lands to form a more complete and balanced community. As described in Chapter III.B.5 of the FEIS, *pages III-37 through III-45*, the WCT proposes to facilitate agricultural development through the implementation of the following strategies: • Establish an 800-acre agricultural preserve, protected through an agricultural conservation easement; • Create a private and/or public agricultural park within the Agricultural Preserve so that Maui farmers can have long-term	**Reference** FEIS, Chapter III.B.5; Site Plan

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	tenure to agricultural land; and • Establish a permanent on-site agricultural water production, distribution and storage system so that farmers have access to a reliable and long-term source of irrigation water. Uses permitted within the Agricultural Preserve, and on the Project's other agricultural lands will include farm stands, farmers markets, and other community supported agricultural programs that are permitted by State and County law. The WCT will also allow for community gardening within appropriate areas of the Project's open space and park network. The demand for community gardening and the ability for program participants to manage the garden plots and share facilities will likely determine the extent of these programs.	
AD.2	**Goal**: Protect the environment and neighboring residences from potential nuisance impacts and environmental and community health impacts that may be associated with agricultural operations.	
Strategies:		
AD.2.1	Inform prospective homeowners in advance of purchasing or leasing property that neighboring lands are in agricultural use, that nuisance impacts may occur, and that agricultural uses are protected under HRS Chapter 165, the Hawai'i Right-to-Farm Law.	
AD.2.2	Pursuant to HRS Section 205-4.6, farmers will be informed that the Project's agricultural lands will not be subject to restrictions that limit the types of agricultural uses that may be conducted within the Agricultural District.	
AD.2.3	Develop appropriate BMPs to help mitigate airborne dust and chemical drift generated by agricultural operations from impacting neighboring land uses. Such BMP's may include:	

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	• Establishing appropriate buffers between actively used agricultural lands and homes. • Planting windbreaks within the buffer areas to further mitigate agricultural impacts to homeowners. • Where feasible, locating the least noxious agricultural activities in closer proximity to urban uses while locating the more noxious activities further away. • Limiting vehicle speeds on unpaved access roads within the agricultural area. • Requiring farmers to implement agricultural BMPs and erosion control measures to reduce dust and agricultural runoff from impacting neighboring properties. BMPs that may be implemented to mitigate chemical and pesticide drift include: • Instituting a dust and chemical drift education and management program to ensure that farmers are properly trained in BMP's that can reduce airborne emissions from their activities. • Establishing suitable buffer zones between agricultural lands where pesticides might be applied and sensitive environments that could be negatively impacted. • Establishing windbreaks to capture windblown emissions and to slow the movement of wind. • Conducting spraying and other nuisance related activities when winds are blowing away from sensitive environments and limiting spraying to periods

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	of low wind speeds to reduce drift distance. • Ensuring that nozzles used in the application of pesticides and/or herbicides produce the largest or coarsest size droplets possible. • Encouraging the use of the lowest end of the pressure range when spraying pesticides. • Following all pesticide application directions as shown on the product labels. • Using drift control additives, when needed, to increase the size of droplets in order to reduce drift. • Directing recreation uses, such as off-road biking, hiking and jogging, to the perimeter of agricultural areas where chemical drift would not be a concern.	
IMPLEMENTATION DISCUSSION		
AD.2.1 through 2	While the WCT's Agricultural Preserve will enhance the quality of life of the Project's residents and will improve the sustainability of the Island, it is well established that agricultural operations can also cause nuisance impacts to neighboring property owners. In response, prospective buyers and lessees of the WCT's residential, commercial and civic lands will be informed of the WCT's ongoing agricultural operations. Likewise, agricultural operators will be informed that agricultural operations are protected from nuisance impacts through Right-to-Farm laws. However, agricultural operators will also be informed that they are required to be good stewards of the agricultural lands they are farming and must adhere to strict BMP's that reduce impacts from their operations.	**References** FEIS, Chapter V.A.7

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AD.2.3	BMP's for reducing agricultural windblown emissions of dust, agricultural chemicals and pesticides will be adopted and implemented by WCT farmers to mitigate agricultural impacts. The enforcement of these practices will be the responsibility of the entity responsible for managing the WCT's agricultural lands as well as the WCT Homeowners Association that will be established to administer certain provisions of the Project's Design Guidelines and CC&R's.	**References** FEIS, Chapter V.A.7
AGRICULTURAL DEVELOPMENT AND LOCAL FOOD PRODUCTION IMPLEMENTING ACTIONS		
ADLF.T.1	Establish an agricultural easement upon the Project's 800-acre Agricultural Preserve	
ADLF.T.2	Establish a deed restriction upon the remaining WCT agricultural lands to limit future subdivision potential to no more than five future agricultural lots	
ADLF.2.3	Implement the Project's conceptual agricultural development plan as documented in Chapter III.B.5 of the FEIS	
HEALTH & WELLNESS		
HW.1	**Goal:** Establish a community that promotes health and wellness	
Strategies:		
HW.1.a	Establish a network of off-road pedestrian and bicycle paths.	
HW.1.b	Establish a compact and mixed-use settlement pattern that promotes active transportation.	
HW.1.c	Construct "complete streets" that safely accommodate multi-modal transportation.	
HW.1.d	Provide a network of parks and open spaces linked by pedestrian and bicycle paths.	
HW.1.e	Promote the establishment of health related businesses and services within the	

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	development, including: gyms and fitness centers, health food stores, farmers markets, medical services, etc.	
HW.1.f	Establish the opportunity for community gardening.	
HW.1.g	Promote and support the establishment of pedestrian and bicycle networks linking the project with neighboring communities.	
HW.1.h	Incorporate a diversity of park types, including mini-parks, neighborhood parks and community parks with both active and passive uses.	
IMPLEMENTATION DISCUSSION		
HW.1a through h	The WCT master plan, as described in Chapter III of the FEIS, *pages III-1 through III-54*, promotes community health by proposing a balance of uses to create a complete community and through urban design that facilitates active transportation. As documented in Chapter III of the FEIS, the Project also includes a diversity of passive and active recreation facilities that includes walking and biking trails and opportunities for community gardening. The buildout of the WCT will occur through the implementation of the Project's zoning ordinance and its design guidelines as well as by compliance with other applicable standards prescribed in State and County ordinances. The WCT zoning ordinance and design guidelines will be reviewed and adopted by the Maui Planning Commission and will serve as the primary vehicle for implementing the Master Plan. The Sustainability Plan will be incorporated into the design guidelines by reference.	**References** FEIS, Chapter III; WCT Site Plan
HEALTH AND WELLNESS IMPLEMENTING ACTIONS		
TASK	**ACTION**	

WCT SUSTAINABILITY PLAN GOALS, OBJECTIVES, STRATEGIES AND IMPLEMENTATION	
HW.T.1	Implement the WCT Master Plan as documented in Chapter III of the FEIS
HW.T.2	Prepare the Project's zoning ordinance and design guidelines to serve as the primary implementing tool for the WCT Master Plan and incorporate the Sustainability Plan into the design guidelines by reference