### DRAFT DESCRIPTION OF THE WAIKAPU COUNTRY TOWN COMMUNITY PLAN DESIGNATION

The Waikapu Country Town is intended to provide the urban character of a traditional small town, with a diverse mix of single-family, multifamily, and rural residences; park land; open space; commercial and employment uses; and an elementary or intermediate school to create a "complete community". Pedestrian and bicycling infrastructure that includes sidewalks, separated multi-use pedestrian paths and trails, traffic calming along neighborhood and collector roadways, and interconnected networks of parks and open spaces shall be integrated into the community design to create a walkable community.

The town includes prime agricultural lands south and west of the growth boundaries. The agricultural lands to the south of the growth boundary, encompassing approximately 800-acres, are to be preserved in perpetuity through an agricultural or conservation easement. The remaining agricultural lands, encompassing approximately 280 acres, are located mostly to the west (mauka) of the growth boundaries and may be subdivided into five additional agricultural lots.

The rural lots mauka of Honoapiilani Highway are to be developed using a Conservation Subdivision Design. The design should provide uninterrupted walking and bicycling trails, preserve mauka and makai views, and protect environmentally sensitive lands along the Waikapu Stream and mauka of the rural subdivision.

Dwelling Unit Count: 1,433 residential units	
	(Up to 80 of these units can be rural residences.
	Up to 146 additional "Ohana dwelling units" may be constructed).
<b>Residential Product Mix</b>	From 25% to 50% of the project mix shall be multi-family units
Parks and Open Space	A diversity of park types and open space elements shall be provided
	in a manner that is consistent with the project's form-based zoning
	code and design guidelines

Planning Guidelines:

#### EXHIBIT 21

DAVID Y. IGE GOVERNOR OF HAWAII





#### STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE HISTORIC PRESERVATION DIVISION KAKUHIHEWA BUILDING 601 KAMOKILA BLVD, STE 555 KAPOLEI, HAWAII 96707

September 22, 2017

Michael Atherton Waikapū Partners LLC 1670 Honoa'pi'ilani Highway Wailuku, HI 96793 Email: <u>athertonisland@gmail.com</u> IN REPLY REFER TO: Log No. 2017.02060 Doc No. 1709MBF15 Archaeology

Dear Mr. Atherton,

SUBJECT: Chapter 6E-42 Historic Preservation Review – Archaeological Inventory Survey Report for Several Parcels of Land Situated within Waikapū Ahupua'a; Wailuku District Pū'ali Komohana Moku Waikapū Ahupua'a, Wailuku District, Island of Maui TMK: (2) 3-6-002:003; (2) 3-6-004:003, 006, 007

Thank you for the opportunity to review the subject submittal titled, Draft Archaeological Inventory Survey Report for Several Parcels of Land Situated within Waikapū Ahupua'a; Wailuku District Pū'ali Komohana Moku; TMK: (2) 3-6-002:003; (2) 3-6-004:003, (2) 3-6-004:006; and (2) 3-6-005:007 (Guerriero et al., September 2017). Revisions to the archaeological inventory survey (AIS) report were requested by the State Historic Preservation Division (SHPD) on August 10, 2017 (Log No. 2013.5793, Doc No. 1708MBF04). The revised report was received by the SHPD on September 15, 2017.

Under contract to Waikapū Partners, LLC, Archaeological Services Hawai'i, LLC (ASH) conducted an archaeological inventory survey (AIS) of approximately 503 acres. The original AIS was initiated by the developer in advance of the project, and the draft AIS report was attached to a draft environmental impact statement (DEIS) submitted to the SHPD on October 3, 2013; no record was found that SHPD reviewed the DEIS.

Waikapū Partners, LLC has landholdings for the subject project totaling 1,576 acres. As stated above, only 503 of the 1,576 acres are covered by the AIS. The remaining 1,073 acres within a portion of TMK: (2) 3-6-002:003 and (2) 3-6-004:003 are currently in small-scale agricultural production, and will remain as such, within the State Land Use Agricultural District. The 1,073 agricultural acres are not covered under this AIS report.

Furthermore, 800 of the 1,073 acres of the current small-scale agricultural land will be preserved in perpetuity for small-scale agricultural use. SHPD stipulates that the applicant shall address any impacts to historic properties related to the 1,576 subject project and that SHPD shall have the opportunity to comment should (1) future development be proposed within the agricultural lands outside the preservation easement, requiring an entitlement change or Special Use Permit (SUP); or (2) there is a change in the scope of work for the 503 acres or if any projects are proposed within the remaining 1,073 acres that were not surveyed, allowing SHPD the opportunity to determine whether a supplemental AIS is warranted to identify the presence or absence of historic properties, including burials, and to ascertain the extent, significance, and potential adverse effects that future development may impose.

The testing strategy of the original AIS consisted of a partial-extent pedestrian survey, and subsurface exploration with 150 randomly-placed, mechanically-excavated test trenches. Four historic properties were identified and

SUZANNE D. CASE CHAIRPERSON BOARD OF LAND AND NATURAL RESOURCES COMMISSION ON WATER RESOURCE MANAGEMENT

> ROBERT K. MASUDA FIRST DEPUTY

JEFFREY T. PEARSON, P.E. DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES BOATING AND OCEAN RECREATION BUREAU OF CONVEYANCES COMMISSION ON WATER RESOURCE MANAGEMENT CONSERVATION AND RESOURCES ENFORCEMENT ENGINEERING FORSTRY AND WILDLIFE HISTORIC PRESERVATION KAHOOLAWE ISLAND RESERVE COMMISSION LAND STATE PARIS Mr. Atherton September 22, 2017 Page 2

designated with State Inventory of Historic Places (SIHP) site numbers: Sites 50-50-04-7881, 50-50-04-7882, 50-50-04-7883, and 50-50-04-7884. These four sites are comprised of nineteen component features, most of which are related to sugarcane cultivation. One previously identified historic property, known as the Waihe'e Ditch (Site 50-50-04-5197), is extant in the survey area. Features 1-18 of Site 50-50-04-7881 consist of concrete-lined ditches, sluice gates, and dirt culverts with concrete-lined headwalls. Site 50-50-04-7882 is a moderately deteriorated "Lshaped" retaining wall. Site 50-50-04-7883 is a World War II-era bunker, and Site 50-50-04-7884, Features 1- 3 are described as secondary deposits of historic materials recorded at three separate localities within the survey area. The subsurface testing strategy did not identify any buried historic properties. A preservation plan (PP) will be developed for Sites 50-50-04-7881 (irrigation features) and 50-50-04-7883 (bunker).

Pursuant to Hawaii Administrative Rules (HAR) §13-284-6, intended for the evaluation of significance of documented historic properties, Sites 50-50-04-7881, 50-50-04-7882, and 50-50-04-7884 are assessed as significant under Criterion d, as they have yielded, or have the potential to yield, significant information pertaining to the history of the area. Site 50-50-04-7883, the World War II bunker, is considered significant under three criteria: Criterion a, association with an important historical event; Criterion c, distinctive characteristics of construction; and Criterion d, possessing significant information pertaining to the history of the area. The WWII bunker, is quite unique in that it is one of the last remaining examples of this type of architecture in relatively good condition, on the island of Maui. The draft AIS report indicates that the proposed project will affect the historic scatters associated with Site 50-50-04-7884, and likely also Site 50-50-04-5197 (Waihe'e Ditch). In addition, it is noted that portions of the project area are located within an area which may contain human burials; burials have been documented in the area.

The draft AIS report indicates one or more historic properties will be affected by the subject project, the project effect recommendation is "Effect, with agreed upon mitigation commitments". The agreed upon mitigation commitments are (1) data recovery in the form of archaeological monitoring, (2) preservation of Sites 50-50-04-7881 and 50-50-04-7883, and (3) if Site 50-50-04-5197 is impacted, it will be further documented through architectural documentation; the nature of the architectural documentation will be determined in consultation with the SHPD.

The SHPD concurs with the site significance assessments and a project effect determination of "Effect, with agreed upon mitigation commitments". SHPD also concurs with archaeological monitoring, stipulating that archaeological monitoring shall be conducted for all ground disturbing activities.

The revised draft AIS addresses the issues and concerns raised in our earlier corresponds and now meets the minimum requirements specified in HAR §13-276-5. It is accepted. Please send two hardcopies of the document, clearly marked FINAL, along with a text-searchable PDF version, to the Kapolei SHPD office, attention SHPD Library.

As stipulated in HAR §13-275-7, when SHPD comments that a project will result in "effect with agreed upon mitigation commitments," then detailed mitigation plans shall be developed for SHPD review and acceptance prior to project work commencing. **SHPD looks forward to** receiving an archaeological monitoring plan (AMP) meeting the requirements of HAR §13-279-4 and a preservation plan meeting the requirements of HAR §13-277.

You may contact Dr. Matthew Barker Fariss at <u>matthew.b.fariss@hawaii.gov</u>, or at (808) 243-4626, for any questions regarding this letter.

Aloha,

Alan S. Downer, PhD Administrator, State Historic Preservation Division Deputy State Historic Preservation Officer

Mr. Atherton September 22, 2017 Page 3

cc: County of Maui Planning <u>Planning@co.maui.hi.us</u>

> Michael Summers msummers@planningconsultantshawaii.com

County of Maui Cultural Resources Commission <u>Annalise.Kehler@co.maui.hi.us</u>

Lisa Rotunno-Hazuka lisa@ashmaui.com County of Maui Public Works public.works@mauicounty.gov

DLNR Land Division Russell.Y.Tsuji@hawaii.gov

Lorene Maki Lorene.K.Maki@hawaii.gov

.

# Waikapū Country Town Sustainability Plan



Prepared for: Mr. Michael Atherton Waikapu Properties, LLC P.O. Box 1870 Manteca, CA 95336

Prepared by: Planning Consultants Hawaii, LLC. Urban and Regional Planning 2331 W. Main Street Wailuku, Hawaii 96793 Phone: (808) 244-6231 email: msummers@planningconsultantshawaii.com



March, 2017

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.*"<sup>1</sup> 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.

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

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

<sup>&</sup>lt;sup>1</sup> Brundtland Report, 1987

SUSTAINABILITY PLAN

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

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.<sup>2</sup> 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.

WCT Sustainability	§226-108 Sustainability Guiding Principles	
Plan is Supportive		
✓	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;	
<u> </u>	Plan for and provide efficient and effective public facilities and	
·	infrastructure;	
.(	Support sustainable economic development and the needs of small	
·	business; and	
$\checkmark$	Promote community responsibility, empowerment, and uniqueness.	

**Table 2.** Consistency with MIP guiding land use principles

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.

<sup>&</sup>lt;sup>2</sup> Maui Island Plan, December 2012, pages 8-9 through 8-10.

WAIKAPŪ COUNTRY TOWN SUSTAINABILITY PLAN

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

#### 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.

URBAN I	DESIGN
	Goal: Establish a more complete community that balances housing with the
00.1	provision of on-site supporting commercial, civic and employment uses.
ENERGY	USE
EU.1	Goal: Reduce WCTs demand for carbon-based fuels
511 2 A	Objective: Reduce energy use in residential, commercial and institutional buildings
E0.2.A	by 30% to 50% or more from baseline levels
FII 3 B	Objective: Facilitate carbon storage and sequestration with additional forest and
20.3.5	tree coverage
EU.4.C	Objective: Develop renewable energy sources to offset at least 40 percent of the
	Project's electrical energy demand
WATER	
WU.1	Goal: Significantly reduce the Project's potable and non-potable water demand

**Table 3:** WCT Sustainability Goals and Objectives

SUSTAINABILITY PLAN

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

WU.1.A	<b>Objective:</b> Reduce the overall Project demand for potable water use by 30 to 50 percent
STORM D	RAINAGE
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	<b>Objective:</b> Prevent runoff and pollutants from being discharged from construction sites
WASTE N	IANAGEMENT
WM.1	<b>Goal:</b> Reduce the volume of Project waste from entering landfills during construction and operations
AGRICUL	TURE DEVELOPMENT & LOCAL FOOD PRODUCTION
AD.1	<b>Goal:</b> Create and maintain economically viable agricultural production on WCT agricultural lands
AD.2	<b>Goal:</b> Protect the environment and neighboring residences from potential nuisance impacts and environmental and community health impacts that may be associated with agricultural operations.
HEALTH 8	& 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.

WU.1.A

SUSTAINABILITY PLAN

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

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

#### GOALS, OBJECTIVES, STRATEGIES AND IMPLEMENTATION

#### **URBAN DESIGN**

	Goal: Establish a more complete community that balances how	using with the	
UD.1	provision of on-site supporting commercial, civic and employment use	25	
Stratogio			
Strategies	S:		
UD.1.a	Integrate a balanced mix of residential, commercial, employment, an	d 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	h income wage	
	earners.		
UD.1.d	Build "Complete Streets".		
UD.1.e	Establish a diverse range of active and passive recreation opportunitie	es.	
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 betwee	een residential,	
	commercial and civic uses.		
UD.1.i	Incorporate adequate transmit stops throughout the development.		
UD.1.j	Meet all ADA standards for accessibility.		
IMPLEME	NTATION DISCUSSION		
UD.1.a	Integrate Balanced Mix of Uses. As documented in Chapter III of	References	
	the FEIS, pages III-6 through III-24 and pages III-50 through III-54,	FEIS, Chapter III;	
	the Project will be developed with a mix of residential housing	WCI Site Plan	
	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		

SUSTAINABILITY PLAN

WCT SUSTAINABILITY PLAN		
GOALS, (	DBJECTIVES, 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:	
	<ul> <li>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;</li> </ul>	
	<ul> <li>Up to 146 additional "Ohana" units to help address affordable housing demand;</li> </ul>	
	<ul> <li>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;</li> </ul>	
	<ul> <li>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;</li> </ul>	
	• Active and passive park space of approximately 32.44 acres;	
	An elementary school on approximately 12 acres;	
	Approximately 800 acres of agricultural lands to be	
	protected in perpetuity for agricultural use and approximately 277 acres of agricultural lands to be limited	
	to no more than five additional agricultural lots.	
UD.1.b	Incorporate compact and mixed use development patterns. It is	References
	well established that compact and mixed-use development	FEIS, Chapter III;
	promotes walking and bicycling and reduces vehicular trips by	Site Plan; Walkability
	making non-motorized transportation more convenient. The WCT	Diagram
	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	

#### SUSTAINABILITY PLAN

WCT SUSTAINABILITY PLAN		
GOALS, C	DBJECTIVES, STRATEGIES AND IMPLEMENTATION	
	development program expects the single-family net residential	
	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	References
	wage earners. As documented in Chapter III of the FEIS, the	FEIS, Chapters
	Project is anticipated to be developed with a diversity of housing	III and V.B.2
	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 promotion a diversity of bouning types within the	
	In addition to promoting a diversity of nousing types within the	
	Project, the WCI 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.	
UD.1.d	Build Complete Streets. "Complete" streets facilitate non-	References
	motorized transportation by incorporating traffic calming,	FEIS, Chapter III; WCT Site Plan;

SUSTAINABILITY PLAN

WCT SUSTAINABILITY PLAN		
GOALS, (	DBJECTIVES, STRATEGIES AND IMPLEMENTATION	
	As documented in Chapter III of the FEIS, pages III-25 through III-34,	Figures 21 and 22
	the WCT intends to promote walking and bicycling by incorporating	of FEIS
	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.	
UD.1.e	Establish a diverse range of active and passive recreation	References
	opportunities. Chapter III.B.4 of the FEIS (pages III-35 through III-	FEIS, Chapter III;
	37) documents the WCT's plan for providing a diverse range of	WCT Site Plan;
	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 <i>pages III-50 through III-54</i> .	
UD.1.f	Encourage Community Gardening within Designated Areas. As	References
	documented in Chapter III.B.4 of the FIES (page III-37), the WCT	FEIS, Chapter III;
	may include opportunities for community gardening within its park	WCT Site Plan;
	system and in appropriate areas within the rural and agricultural	

#### SUSTAINABILITY PLAN

WCT SUSTAINABILITY PLAN		
GOALS, (	DBJECTIVES, STRATEGIES AND IMPLEMENTATION	
	lands. It is envisioned that small plots could be offered for lease and	
	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.	References
	Developing pedestrian and bicycle paths and trails separated from	FEIS, Chapter III;
	vehicular traffic can create an environment that facilitates non-	WCT Site Plan;
	motorized transportation, which reduces CO2 emissions and	of the FEIS
	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.	
UD.1.h	Ensure efficient vehicular and non-motorized connectivity	References
and	between residential, commercial and civic uses.	FEIS, Chapter
UD.1.i		III.3.a through f o
	Incorporate adequate transmit stops throughout the	
	<i>development.</i> 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	

SUSTAINABILITY PLAN

WCT SUSTAINABILITY PLAN			
GOALS, OBJECTIVES, STRATEGIES AND IMPLEMENTATION			
	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. 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 D	ESIGN 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 o	f 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 Departm	nent of Planning	
	to ensure urban design compliance with the WCT Master Plan		

SUSTAINABILITY 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	een 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	ent.	
EU.1.f	Support regional bicycle and pedestrian ways to connect the dev	velopment with	
	neighboring communities.		
IMPLEMEN	NTATION DISCUSSION		
EU.1a - f	The WCT will reduce its demand for carbon-based transportation	References	
	fuels by facilitating non-motorized transportation and reducing	FEIS, Chapter	
	vehicular commuting distances through the implementation of	III.3.a through f	
	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		

SUSTAINABILITY PLAN

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 <i>pages III-50 through III-54</i> . 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.	
Objective: Reduce energy use in residential, commercial and institutional		itional buildings
EU.2.A	by 30% to 50% or more from baseline levels	

#### SUSTAINABILITY PLAN

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.I	Allow for laundry to be hang-dried in appropriate areas.	
IMPLEME	NTATION DISCUSSION	
EU.2.A.a	The WCT's energy sustainability program is multi-faceted, with the goal of reducing	
through I	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 carbon emissions are generated by residential and commercial	
	buildings. The WCT will reduce its energy demand from commercial, residential and	

SUSTAINABILITY PLAN

WCT SUSTAINABILITY PLAN			
GOALS, OBJECTIVES, STRATEGIES AND IMPLEMENTATION			
	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).		
IMPLEME	IMPLEMENTATION DISCUSSION		
EU.3.B.a	The buildout of the WCT will occur through the implementation of the Project's		
through	zoning ordinance and its Design Guidelines as well as other applicable land use and		
b	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		

SUSTAINABILITY PLAN

WCT SUSTAINABILITY PLAN			
GOALS, C	BJECTIVES, STRATEGIES AND IMPLEMENTATION		
	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.		
	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.		

SUSTAINABILITY PLAN

WCT SUSTAINABILITY PLAN				
GOALS, O	GOALS, OBJECTIVES, STRATEGIES AND IMPLEMENTATION			
EU.4.C.d	Assess the viability of storing energy on-site for direct sale to We	CT customers if		
	connecting to the MECO grid is not available.			
IMPLEMEN	NTATION DISCUSSION			
EU4.C.a	As noted in Chapter V.D.2 of the FEIS (pages V-96-97), the WCT	References		
through	intends to promote the use of renewable energy in order to reduce	FEIS, Chapter		
d	the Project's energy costs, while also reducing its CO2 emissions.	III.B.5 and V.D.2		
	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 may			
	develop 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 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			

SUSTAINABILITY PLAN

WCT SUSTAINABILITY PLAN				
GOALS, O	GOALS, OBJECTIVES, STRATEGIES AND IMPLEMENTATION			
	be driven by consumer demand and the technical, regulatory and			
	financial viability of the individual projects at the time the WCT is			
	being developed.			
ENERGY U	SE 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			
	strategies EU.2.A.a through I; 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			

SUSTAINABILITY PLAN

WCT SUSTAINABILITY PLAN			
GOALS, O	BJECTIVES, STRATEGIES AND IMPLEMENTATION		
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		
1	rogulatory foosibility		
	regulatory reasibility.		
WATER U	JSE Coole Significantly reduce the preject's notable and non-notable water demand		
WATER U	JSE Goal: Significantly reduce the project's potable and non-potable water demand Objective: Beduce the overall project demand for potable water use by 30 to 50		
WATER U WU.1	JSE Goal: Significantly reduce the project's potable and non-potable water demand Objective: Reduce the overall project demand for potable water use by 30 to 50		
WATER U WU.1 WU.1.A Strategies:	JSE Goal: Significantly reduce the project's potable and non-potable water demand Objective: Reduce the overall project demand for potable water use by 30 to 50 percent		
WATER U WU.1 WU.1.A Strategies: WU.1.A.a	JSE Goal: Significantly reduce the project's potable and non-potable water demand Objective: Reduce the overall project demand for potable water use by 30 to 50 percent Utilize low flow fixtures that exceed baseline standards established by the 2006		
WATER U WU.1 WU.1.A Strategies: WU.1.A.a	JSE Goal: Significantly reduce the project's potable and non-potable water demand Objective: Reduce the overall project demand for potable water use by 30 to 50 percent Utilize low flow fixtures that exceed baseline standards established by the 2006 Uniform Plumbing Code by at least 20%.		
WATER U WU.1 WU.1.A Strategies: WU.1.A.a	JSE Goal: Significantly reduce the project's potable and non-potable water demand Objective: Reduce the overall project demand for potable water use by 30 to 50 percent Utilize low flow fixtures that exceed baseline standards established by the 2006 Uniform Plumbing Code by at least 20%. Utilize non-potable water for irrigation of common open spaces, parks, etc.		
WATER U WU.1 WU.1.A Strategies: WU.1.A.a WU.1.A.b	JSE Goal: Significantly reduce the project's potable and non-potable water demand Objective: Reduce the overall project demand for potable water use by 30 to 50 percent Utilize low flow fixtures that exceed baseline standards established by the 2006 Uniform Plumbing Code by at least 20%. Utilize non-potable water for irrigation of common open spaces, parks, etc. Establish dual water systems to provide non-potable water for irrigation of parks		
WATER U WU.1 WU.1.A Strategies: WU.1.A.a WU.1.A.b WU.1.A.c	JSE Goal: Significantly reduce the project's potable and non-potable water demand Objective: Reduce the overall project demand for potable water use by 30 to 50 percent Utilize low flow fixtures that exceed baseline standards established by the 2006 Uniform Plumbing Code by at least 20%. Utilize non-potable water for irrigation of common open spaces, parks, etc. Establish dual water systems to provide non-potable water for irrigation of parks and open space, residential and commercial landscape planting.		
WATER U WU.1 WU.1.A Strategies: WU.1.A.a WU.1.A.c WU.1.A.d	JSE         Goal: Significantly reduce the project's potable and non-potable water demand         Objective: Reduce the overall project demand for potable water use by 30 to 50 percent         Utilize low flow fixtures that exceed baseline standards established by the 2006 Uniform Plumbing Code by at least 20%.         Utilize non-potable water for irrigation of common open spaces, parks, etc.         Establish dual water systems to provide non-potable water for irrigation of parks and open space, residential and commercial landscape planting.         Allow for rainwater catchment throughout the project.		
WATER U WU.1 WU.1.A Strategies: WU.1.A.a WU.1.A.c WU.1.A.c	JSE Goal: Significantly reduce the project's potable and non-potable water demand Objective: Reduce the overall project demand for potable water use by 30 to 50 percent Utilize low flow fixtures that exceed baseline standards established by the 2006 Uniform Plumbing Code by at least 20%. Utilize non-potable water for irrigation of common open spaces, parks, etc. Establish dual water systems to provide non-potable water for irrigation of parks and open space, residential and commercial landscape planting. Allow for rainwater catchment throughout the project. Utilize non-potable water reservoirs to store, capture, and manage the supply of		
WATER U WU.1 WU.1.A Strategies: WU.1.A.a WU.1.A.c WU.1.A.c	JSE         Goal: Significantly reduce the project's potable and non-potable water demand         Objective: Reduce the overall project demand for potable water use by 30 to 50 percent         Utilize low flow fixtures that exceed baseline standards established by the 2006 Uniform Plumbing Code by at least 20%.         Utilize non-potable water for irrigation of common open spaces, parks, etc.         Establish dual water systems to provide non-potable water for irrigation of parks and open space, residential and commercial landscape planting.         Allow for rainwater catchment throughout the project.         Utilize non-potable water reservoirs to store, capture, and manage the supply of non-potable water.		

SUSTAINABILITY PLAN

WCT SUSTAINABILITY PLAN				
GOALS, OBJECTIVES, STRATEGIES AND IMPLEMENTATION				
	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.			
IMPLEMEN	TATION DISCUSSION			
WU.1.A.a	A central sustainability goal of the WCT is to conserve potable and	References		
through h	non-potable water resources through implementation of the	FEIS, Chapter		
	Project's sustainability strategies WU.1A.a through h. As	V.D.4		
	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.			
	<ul> <li>As documented in Chapter VIII.6 of the FEIS, the Project</li> </ul>			
	has undertaken a rigorous review of the Project's			
	wastewater treatment options and has come to the			
	conclusion that constructing a private wastewater			
	reclamation facility on WCT lands is presently the			
	preferred alternative. Should this alternative be			
	implemented, and if technically and economically viable,			
	the wastewater treated at the facility will be recycled so			
	that it can be used for irrigation of the Project's			
	agricultural lands and/or urban park and open space			
	lands.			

SUSTAINABILITY PLAN

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

#### WCT SUSTAINABILITY PLAN

#### GOALS, OBJECTIVES, STRATEGIES AND IMPLEMENTATION

- 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 Plan.

In response to strategies WU.1.A.e and f, the WCT will be using

SUSTAINABILITY PLAN

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

#### WCT SUSTAINABILITY PLAN

#### GOALS, OBJECTIVES, STRATEGIES AND IMPLEMENTATION

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 sections of the Project's zoning ordinance and design guidelines strategies WU.1.A.d, g and h	o the applicable s to implement
WU.T.2	Develop a dual water system that transmits the Project's non-po irrigation and potable water for potable uses.	table water for
WU.T.3	Recycle the Project's wastewater for irrigation uses if the subj reclamation facility is developed.	ect wastewater

SUSTAINABILITY PLAN

WCT SUSTAINABILITY PLAN			
GOALS, OBJECTIVES, STRATEGIES AND IMPLEMENTATION			
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 I	DRAINAGE		
SD.1	Goal: Convert storm water runoff into an economic and environme	ntal 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 tre	enches, etc.	
SD.1.A.d	Promote the use, where practical, of grassed parking and permeable	e pavements for	
	residential driveways, commercial and non-commercial parking lo	ts 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, g	rease, trash and	
	other pollutants from runoff.		
IMPLEMENTATION DISCUSSION			
SD.1.A.a	As documented in Chapter V.D.3 of the FEIS, the WCT will retain	References	
through f	the increase in runoff generated by the Project through the use of	FEIS, Chapter III	

SUSTAINABILITY PLAN

WCT SUSTAINABILITY PLAN			
GOALS, O	BJECTIVES, STRATEGIES AND IMPLEMENTATION		
	on-site retention basins. Chapter V.D.3 of the FEIS, pages V-97 –	and	Chapter
	V-105, documents the Project's preliminary drainage program,	V.D.3	
	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		
	<i>III-54</i> .		
	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 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.		
SD.2.A	<b>Objective:</b> Prevent runoff and pollutants from being discharged from	n constr	uction
	sites		
SD.2.A.a	During the construction phase, utilize a combination of construction	on phase	e BMP's

SUSTAINABILITY PLAN

WCT SUSTAINABILITY PLAN				
GOALS, OBJECTIVES, STRATEGIES AND IMPLEMENTATION				
	such as:			
	• Silt fences;			
	Dust screens;			
	<ul> <li>Seeding/sodding/mulching;</li> </ul>			
	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.			
IMPLEMEN	TATION DISCUSSION			
SD.2.A.a	The Implementation of on-site construction phase BMP's to	Reference		
through b	control stormwater runoff will help to prevent erosion and	FEIS, Chapter		
	sedimentation during the Project's construction phase. Chapter	V.D.3		
	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.			
STORM DR	AINAGE IMPLEMENTING ACTIONS			
TASK	ACTION			
SD.T.1	Implement the Project's Preliminary Drainage program as conceptua	ally described in		
	Chapter V.D.3 of the FEIS			
SD.T.2	Incorporate on-site drainage best practice standards into the applic	able sections of		
	the Project's zoning ordinance and design guidelines to implement	strategies d and		

#### SUSTAINABILITY PLAN

WCT SUSTAINABILITY PLAN		
GOALS, OBJECTIVES, STRATEGIES AND IMPLEMENTATION		
	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 Waikap ${f u}$ 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 N	MANAGEMENT	
	Goal: Reduce the volume of project waste from entering landfills during	
WM.1	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.	
IMPLEMEN	TATION DISCUSSION	
WM.1a	Reducing waste during the construction and operation phases of the WCT is an	
through e	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.	

SUSTAINABILITY PLAN

WCT SUSTAINABILITY PLAN			
GOALS, OBJECTIVES, STRATEGIES AND IMPLEMENTATION			
	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 MA	ANAGEMENT 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		
	disseminate literature to Project residents on recycling best practices and to		
	participate in County recycling programs		
AGRICUI	TURE DEVELOPMENT & LOCAL FOOD PRODUCTION		
	Goal: Create and maintain economically viable agricultural production on WCT		
AD.1	agricultural lands		
Strategies:			
AD.1.a	Protect in perpetuity approximately 800 acres of prime agricultural lands for		

SUSTAINABILITY PLAN

WCT SUSTAINABILITY PLAN			
GOALS, OBJECTIVES, STRATEGIES AND IMPLEMENTATION			
	agricultural use and limit future subdivision to approximately	5 lots for the	
	remaining agricultural lands.		
AD.1.b	Create 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 propose	ed parks and/or	
	open space network		
AD.1.d	Encourage the establishment of a farmers market, farm stands, a	and community	
	supported agricultural programs within the WCT.		
IMPLEMEN	TATION DISCUSSION		
AD.1.a	The WCT is a unique development concept in Hawai'i because of its	Reference	
through d	master planning of urban, rural and agricultural lands to form a more	FEIS, Chapter	
	complete and balanced community.	III.B.5; Site Plan	
	As described in Chapter III.B.5 of the FEIS, <i>pages III-37 through III-45</i> , the WCT proposes to facilitate agricultural development through the implementation of the following strategies:		
	<ul> <li>Establish an 800-acre agricultural preserve to be protected in</li> </ul>		
	perpetuity for agricultural use;		
	Create a private and/or public agricultural park within the		
	Project's agricultural lands so that Maui farmers can have long-		
	term 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		

SUSTAINABILITY PLAN

WCT SUSTAINABILITY PLAN		
GOALS, OBJECTIVES, STRATEGIES AND IMPLEMENTATION		
	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	<b>Goal</b> : Protect the environment and neighboring residences from potential nuisance	
	impacts and environmental and community health impacts that may be associated	
	with agricultural operations.	
Strategies:	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:	
	• 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.	

#### SUSTAINABILITY PLAN

WCT SUSTAINABILITY PLAN		
GOALS, OBJECTIVES, STRATEGIES AND IMPLEMENTATION		
<ul> <li>Limiting vehicle speeds on unpaved access roads within the agricultural area.</li> </ul>		
<ul> <li>Requiring farmers to implement agricultural BMPs and erosion control measures to reduce dust and agricultural runoff from impacting neighboring properties.</li> </ul>		
BMPs that may be implemented to mitigate chemical and pesticide drift include:		
<ul> <li>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.</li> </ul>		
<ul> <li>Establishing suitable buffer zones between agricultural lands where pesticides might be applied and sensitive environments that could be negatively impacted.</li> </ul>		
<ul> <li>Establishing windbreaks to capture windblown emissions and to slow the movement of wind.</li> </ul>		
<ul> <li>Conducting spraying and other nuisance related activities when winds are blowing away from sensitive environments and limiting spraying to periods of low wind speeds to reduce drift distance.</li> </ul>		
<ul> <li>Ensuring that nozzles used in the application of pesticides and/or herbicides produce the largest or coarsest size droplets possible.</li> </ul>		
<ul> <li>Encouraging the use of the lowest end of the pressure range when spraying pesticides.</li> </ul>		
<ul> <li>Following all pesticide application directions as shown on the product labels.</li> </ul>		

SUSTAINABILITY PLAN

WCT SUSTAINABILITY PLAN		
GOALS, OBJECTIVES, STRATEGIES AND IMPLEMENTATION		
	<ul> <li>Using drift control additives, when needed, to increase the in order to reduce drift.</li> </ul>	size of droplets
	Directing recreation uses, such as off-road biking, hiking and perimeter of agricultural areas where chemical drift w concern.	d jogging, to the ould not be a
		Defenences
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.	FEIS, Chapter V.A.7
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

SUSTAINABILITY PLAN

WCT SUS	WCT SUSTAINABILITY PLAN	
GOALS, OBJECTIVES, STRATEGIES AND IMPLEMENTATION		
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	
	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.	
IMPLEMEN	IMPLEMENTATION DISCUSSION	
## WAIKAPŪ COUNTRY TOWN

SUSTAINABILITY PLAN

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

WCT SUSTAINABILITY PLAN										
GOALS, OBJECTIVES, STRATEGIES AND IMPLEMENTATION										
HW.1a	The WCT master plan, as described in Chapter III of the FEIS, References									
through h	pages III-1 through III-54, promotes community health by	FEIS, Chapter III;								
	proposing a balance of uses to create a complete community and	WCT Site Plan								
	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.									
HEALTH AI	ND WELLNESS IMPLEMENTING ACTIONS									
TASK	ACTION									
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									

ALÀN M. ARAKAWA Mayor

WILLIAM R. SPENCE Director

MICHELE CHOUTEAU McLEAN Deputy Director



## COUNTY OF MAUI DEPARTMENT OF PLANNING

August 2, 2017

MEMORA	NDUM		S S S S S S S S S S S S S S S S S S S
TO:	Daniel Orodenker Executive Director Land Use Commission State of Hawaii P. O. Box 2359 Honolulu, Hawaii 96804	ب ج 1 2 2 3 2 3 2 3 3 3 3 3 3 3 3 3 3 3 3 3	AVE OF HAWAII
FROM:	⊖ William Spence, Planning Director WV	Ľ	

#### SUBJECT: DOCKET No. A15-798 / WAIKAPU PROPERTIES, LLC

#### TRANSMITTED ARE THE FOLLOWING:

COPIES	DATE	DESCRIPTION
Original	8/1/17	Position Statement, Department of Planning, County of Maui, In Petitioner's Motion to Amend Land Use District Boundaries for Waikapu Properties, LLC Project
Original	8/2/17	Certificate of Service

- ) For your information & files
  - ) For approval & signature
  - Per your request

- ) For your review and approval
- ) See REMARKS below
- (X) For filing

Attachments WRS:KFW:lak K:\WP\_DOCS\PLANNING\A\2015\15-798WaikapuProperties\LUC\_Transmittal\_Sheet\_August\_2017.doc



#### DEPARTMENT OF PLANNING COUNTY OF MAUI One Main Plaza 2200 Main Street, Suite 315 Wailuku, Hawaii 96793 Telephone: (808) 270-7735 Facsimile: (808) 270-7634

#### BEFORE THE LAND USE COMMISSION

#### **OF THE STATE OF HAWAII**

In the Matter of the Petition of:

WAIKAPU PROPERTIES, LLC; MTP LAND PARTNERS, LLC; WILLIAM S. FILIOS, Trustee of the William S. Filios Separate Property Trust dated APRIL 3, 2000; and WAIALE 905 PARTNERS, LLC,

To Amend the Agricultural Land Use District ) Boundaries into the Rural Land Use District ) for certain lands situate at Waikapu, District ) of Wailuku, Island and County of Maui, ) State of Hawaii, consisting of 92.394 acres ) and 57.454 acres, bearing Tax Map Key ) No. (2) 3-6-004:003 (por) and to Amend the ) Agricultural Land Use District Boundaries ) into the Urban Land Use District for certain ) lands situate at Waikapu, District of ) Wailuku, Island and County of Maui, ) State of Hawaii, consisting of 236.326 acres,) 53.775 acres, and 45.054 acres, bearing ) Tax Map Key No. (2) 3-6-002:003 (por), ) (2) 3-6-004:006 and (2) 3-6-005:007 (por). Docket No. A15-798

TESTIMONY AND POSITION STATEMENT DEPARTMENT OF PLANNING, COUNTY OF MAUI; CERTIFICATE OF SERVICE

#### POSITION STATEMENT OF THE DEPARTMENT OF PLANNING, COUNTY OF MAUI

In accordance with §15-15-55 of the State Land Use Commission Rules, the Department of Planning, County of Maui, (hereinafter referred to as "Department") supports, subject to conditions, the State Land Use District Boundary Amendment filed by Waikapu Properties, LLC, MTP Land Partners, LLC; and William S. Filios, Trustee of the William S. Filios Separate Property Trust (hereinafter referred to as the "Petitioner") to reclassify approximately 253.05 acres at Maui Tax Map Key Nos. (2) 2-2:024:016 and 017, and (2) 2-2-002:084 (por.) (hereinafter referred to as the "Petition Area") from the Agricultural Land Use District to the Urban Land Use District at Kihei, Island of Maui,

Hawaii. The State Land Use Commission's primary mission in this case is to determine if the lands under question are appropriate for redesignation from agricultural use to urban and rural uses. The specific details of the project will be reviewed by the County of Maui.

#### Petitioner's Proposed Use of the Property

The Petitioner is proposing to amend the land use district boundaries of certain lands consisting of about 149.848 acres within Tax Map Key No. (2) 3-6-004:003 (por), from State Land Use Agricultural District to State Land Use Rural District and to amend the land use district boundaries of certain lands consisting of about 335.155 acres within Tax Map Key No. (2) 3-6-002:003 (por), (2) 3-6-004:006 and (2) 3-6-005:007 (por) from the Agricultural District to the State Land Use Urban District. All of the lands which consist of about 485.003 acres are referred to as the Petition Area. The Petition Area surrounds a 14 acre parcel which was placed in the Urban District by the Maui County Council in October of 1992. The Petitioner is proposing to develop a new residential mixed-use community on lands in and around the Maui Tropical Plantation which is just south of Waikapu, Maui and located in the Wailuku-Kahului Community Plan Area. The proposed project will encompass 499.003 acres of land to be used for urban and rural development. Approximately 1,077.168 acres will remain in agricultural use and about 800 acres of land this land will be placed into an agricultural conservation easement. The project area is within the Maui Island Plan's Small Town Growth Boundary and is identified as the "Tropical Town Planned Growth Area." The Maui Island Plan allocated 1,433 residential units and support commercial and civic uses to the Planned Growth Area.

#### Background Information

The State Land Use Commission accepted the Final Environmental Impact Statement that was required for the County Community Plan Amendment and potential use of State and County lands on January 18, 2017.

#### Land Use

The Petition Area is zoned Agricultural and Project District on certain portion of lands by the County and designated Agriculture and Project District on certain portion of lands in the Wailuku-Kahului Community Plan. As such, the proposed mixed-use is inconsistent with the land use designation in the Community Plan and with County Zoning. Consequently, the Applicant submitted to the County of Maui applications for the Community Plan Amendment (CPA), Change in Zoning (CIZ), and Project District (PD). The CIZ and CPA and PD applications are being held in abeyance by the County until such time as the LUC renders its decision on the District Boundary Amendment Petition. There is also a State Land Use Commission Special Permit for the proposed wastewater facility to be located in the Agricultural District which will be a project less than 15 acres and subject to review by the County of Maui. In reviewing this project, the Department has consistently supported the application and anticipates continuing to do so as the application progresses through both the LUC and County of Maui. The Maui Island Plan specifically designated the Petition Area within the planned growth area, and the subject property was placed within the Urban and Rural Growth Boundaries.

Consequently, the Department recommends that the LUC move forward with its review of the DBA Petition as submitted by the Petitioner in an expeditious manner as the proposed land use changes are consistent with the Maui Island Plan and the lands proposed to be redesignated from Agriculture to Urban and Rural are consistent with Maui County goals and objectives.

#### County and Community Concerns

The public hearing process for review of the Environmental Impact Statement has provided a detailed forum for reviewing and addressing County and Community concerns. Issues of significance were brought forth that were addressed in the Final EIS, most notably the effect of this project on the provision of housing in Maui County.

#### Recommendation

Based on our review of the information provided in the Petition, the Department of Planning finds that the proposed reclassification to the State Land Use Urban District and State Rural District is consistent with the standards for determining Urban District boundaries as set forth in the LUC's Rules. The County reserves its right to further clarify its position, present witnesses and evidence and to propose conditions. The reclassification would also conform to the Maui Island Plan, which was adopted by the Maui County Council by Ordinance No. 4004, effective as of December 28, 2012. The Planning Department supports this Petition for a District Boundary Amendment to provide their requested Urban and Rural District designations.

DATED: Wailuku, Hawaii, <u>UNAUST</u>, 2017.

Amne m.

WILLIAM SPENCE Planning Director Department of Planning

#### BEFORE THE LAND USE COMMISSION

#### OF THE STATE OF HAWAII

In the Matter of the Petition of:

· · · ·

WAIKAPU PROPERTIES, LLC; MTP LAND PARTNERS, LLC; WILLIAM S. FILIOS, Trustee of the William S. Filios Separate Property Trust dated APRIL 3, 2000; and WAIALE 905 PARTNERS, LLC,

To Amend the Agricultural Land Use District ) Boundaries into the Rural Land Use District ) for certain lands situate at Waikapu, District ) of Wailuku, Island and County of Maui, ) State of Hawaii, consisting of 92.394 acres ) and 57.454 acres, bearing Tax Map Key ) No. (2) 3-6-004:003 (por) and to Amend the ) Agricultural Land Use District Boundaries ) into the Urban Land Use District for certain ) lands situate at Waikapu, District of ) Wailuku, Island and County of Maui, ) State of Hawaii, consisting of 236.326 acres,) 53.775 acres, and 45.054 acres, bearing ) Tax Map Key No. (2) 3-6-002:003 (por), ) (2) 3-6-004:006 and (2) 3-6-005:007 (por). Docket No. A15-798

CERTIFICATE OF SERVICE

#### CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing was served on the following on the date indicated below:

DANIEL E. ORODENKER Executive Director State of Hawaii Land Use Commission P.O. Box 2359 Honolulu, Hawaii 96804-2359

Digital Copy to State Land Use Commission, luc@dbedt.hawaii.gov

LEO R. ASUNCION leo.asuncion@dbedt.hawaii.gov Director Office of Planning 235 Beretania Street, 6<sup>th</sup> Floor Honolulu, Hawaii 96813 Electronic Mail

ţ

DAWN TAKEUCHI-APUNA, ESQ. State of Hawaii Department of the Attorney General 425 Queen Street Honolulu, Hawaii 96813

5 1 7

PAUL R. MANCINI JAMES W. GEIGER MANCINI, WELCH & GEIGER, LLP 305 East Wakea Avenue, Suite 200 Kahului, HI 96732 (Attorney for Petitioner)

MICHAEL SUMMERS <u>msummers@planningconsultantshawaii.com</u> Planning Consultants Hawaii, LLC 2331 West Main Street Wailuku, HI 96793

MICHAEL HOPPER Deputy Corporation Counsel Department of the Corporation Counsel County of Maui 200 South High Street Wailuku, Hawaii 96793

MAUI PLANNING COMMISSION County of Maui 250 South High Street Wailuku, Maui, Hawaii 96793

Hand Delivery

August 2, 2017. DATED: Wailuku, Hawaii,

Month

WILLIAM SPENCE A Planning Director Department of Planning

K:\WP\_DOCS\PLANNING\A\2015\15-798WaikapuProperties\2017 Position Statement & CertService.doc

#### Page 5 of 5

Mail

Mail

Electronic Mail

Electronic Mail

ALAN M. ARAKAWA Mayor WILLIAM R. SPENCE

Director

MICHELE CHOUTEAU McLEAN Deputy Director



# COUNTY OF MAUI

June 26, 2018

Mr. Keaka Robinson, Chair and Members of the Maui Planning Commission 2200 Main Street, Suite 315 Wailuku, Hawaii 96793

Dear Chair Robinson and Members:

SUBJECT: URBAN DESIGN REVIEW BOARD (UDRB) COMMENTS FOR THE PROPOSED WAIKAPU COUNTRY TOWN PROJECT, AT 1670 HONOAPIILANI HIGHWAY, WAIKAPU, ISLAND OF MAUI, HAWAII; TMK: (2) 3-6-002:003, (2) 3-6-004:003, (2) 3-6-004:006, (2) 3-6-005:007, AND (2) 3-6-006:036 (CPA 2018/0004) (CIZ 2018/0004)

At a regular meeting held on June 5, 2018, the UDRB reviewed the above-referenced project, and provided the following comment for inclusion into the review of the Form-Based Zoning Code for the project:

1. The Maui Planning Commission (Commission) shall review with particular attention Chapter 19.96.120 Section E of the draft Form-Based Code which currently reads: "The total number of non-Ohana dwelling units may exceed the maximum number of non-Ohana units permitted (1,433 units) if the subject non-Ohana units qualify as State and/or County affordable housing units or are permitted pursuant to an update of the Maui County General Plan." There is concern over the possible environmental impacts of increasing the number of dwelling units in the proposed project above 1,433 without the submission of adequate additional environmental documents and appropriate review.

The Applicant shall provide a written response to the above comment for inclusion into the report to the Commission.

Further, the UDRB reviewed the above-referenced project, and provided the following comments for inclusion into a review of the Design Guidelines to be eventually approved by the Maul County Planning Director:

1. The Applicant shall consider adding additional architectural design flexibility into the Design Guidelines and sample design photographs while still maintaining the overall country town design integrity of the Waikapu Country Town.

**EXHIBIT 25** 

Mr. Keaka Robinson, Chair and Members of the Maui Planning Commission June 26, 2018 Page 2

- 2. The Applicant shall consider a pedestrian underpass or overpass across the Honoapiilani Highway and the pros and cons of such a project.
- 3. The Applicant shall consider including "visitability guidelines" into project architecture for those dwelling units built with the intent of "aging in place."

The Applicant shall provide a written response to the above comments for inclusion into a letter to the Director.

Thank you for your comments. Should you require further clarification, please contact Staff Planner Kurt Wollenhaupt by email at <u>kurt.wollenhaupt@mauicounty.gov</u> or by phone at (808) 270-1789.

Sincerely,

HUNTON CONRAD, Chair Maui County Urban Design Review Board

xc: Clayton I. Yoshida, AICP, Planning Program Administrator (PDF) Kurt F. Wollenhaupt, Staff Planner (PDF) Carolyn Takayama-Corden, Secretary to Boards and Commissions (PDF) Leilani Ramoran-Quemado, Secretary to Boards and Commissions (PDF) Michael Summers, Consultant (PDF) Project File

HC:KFW:ela

k:\wp\_docs\planning\cpa\2018\0004\_waikaputown\udrb\_comments\_ltr.doc



Land Use Planning • Sustainability Services • Community Planning • Development Permits

July 31, 2018

Ms. Michele McLean Director Department of Planning County of Maui One Main Plaza Building 2200 Main Street, Suite 315 Wailuku, Maui, Hawaii 96793

Dear Ms. McLean:

Re: Urban Design Review Board (UDRB) Comments For the <u>Proposed</u> <u>Waikapu Country Town Project</u> in Waikapu, Maui, Hawaii; TMK Nos: (2) 3-6-002:001, (2) 3-6-002:003, (2) 3-6-4:003, (2) 3-6-004:006, (2) 3-6-005:007 and (2) 3-6-006:036.

This letter is in response to the Department's June 26, 2018, letter that documents comments provided by the UDRB at its meeting of June 5, 2018. The UDRB offered one comment regarding the project's form-based zoning code and three comments regarding the design guidelines. The following is the UDRB's comment related to the form-based zoning code and the Applicant's response:

1. The Maui Planning Commission (Commission) shall review with particular attention Chapter 19.96.120 Section E of the draft Form-Based Code which currently reads: "The total number of non-Ohana dwelling units may exceed the maximum number of non-Ohana units permitted (1,433 units) if the subject non-Ohana units qualify as State and/or County affordable housing units or are permitted pursuant to an update of the Maui County General Plan." There is concern over the possible environmental impacts of increasing the number of dwelling units in the proposed project above 1,433 without the submission of adequate additional environmental documents and appropriate review.

2331 West Main Street, Wailuku, HI 96793 • Ph. 808-244-6231 nsummers@planningconsultantshawaii.com www.planningconsultantshawaii.com

*Applicant Response.* The above-referenced section has been removed from the draft form-based zoning code.

The following are the UDRB's comments related to the design guidelines and the Applicant's responses:

1. The Applicant shall consider adding additional architectural design flexibility into the Design Guidelines and sample design photographs while still maintaining the overall country town design integrity of the Waikapu Country Town.

Applicant Response: The design guidelines are intended for architectural design flexibility. This issue is addressed on page V-3 of the design guidelines by the following statement of purpose:

"The purpose of the architectural guidelines is to establish best practice for the design of structures within the WCT. The guidelines are not intended to prescribe any one particular architectural vernacular for any project. Nor are they intended to mandate the replication of the architectural design vernacular of Maui's small plantation era towns. Rather, the guidelines are intended to facilitate architecture that produces aesthetically pleasing and culturally compatible buildings and streetscapes; pleasant and healthy living environments; and energy and water conserving community design."

Moreover, on page V-3 a list of seven general architectural design guidelines is provided to establish parameters for the project's architecture. Guidelines 1, 2, and 4 speak to the issue of design flexibility.

- "1. Incorporate architectural styles that are influenced by Maui's historic architectural precedents and that are compatible with Maui's unique sense of place, climate, and cultural diversity;
- 2. Present scale and massing that is compatible with country town design precedents, and the desire to create a walkable and bikeable community;

> 4. Create an appreciable level of architectural diversity and uniqueness rather than relying upon overt replication and homogeneous architecture."

The variety of illustrations incorporated into the design guidelines, which include sample design photographs, are intended to convey urban design and architectural best practice concepts. These illustrations are to be used as a reference point, or tool, for the benefit of future planners and architects that will use the design guidelines to develop plans for the project.

2. The Applicant shall consider a pedestrian underpass or overpass across the Honoapiilani Highway and the pros and cons of such a project.

Applicant Response: In general, pedestrians desire safety, convenience, comfort, and accessibility in their commutes. These are factors that need to be considered in planning for future pedestrian crossings of the Honoapiilani Highway. Signalized intersections and bridges and/or underpasses are both potential means of facilitating travel across roadways with high traffic volumes traveling at higher rates of speed similar to Honoapiilani Highway. The WCT will include, at a minimum, one signalized intersection at the Honoapiilani Highway and "Main Street" intersection. This intersection will serve as the primary vehicular ingress and egress into the Waikapu Country Town, as it is the most direct route to the project's Town Center District, Main Street District, the elementary school, and the regional park.

The primary benefit of a pedestrian bridge or underpass (i.e., a gradeseparated pedestrian crossing or GSPC) of the Honoapiilani Highway versus a signalized intersection is the greater separation of pedestrians from vehicular traffic that it would provide. In addition, a pedestrian bridge or underpass would likely reduce delays to vehicle commute traffic since no signal time would have to be allocated to pedestrians.

However, there are significant issues associated with incorporating a pedestrian bridge or underpass into the project. For the following reasons such a facility is not proposed:

- A pedestrian bridge or underpass is likely not warranted at the intersection of the Honoapiilani Highway and Main Street. As noted, this intersection will serve as the project's primary ingress and egress because of the activity generating land uses located just mauka and makai of it. The TIAR has determined that this intersection needs to be signalized and it was planned to permit pedestrian crossings. As such, it would be designed with features that enhance safety for pedestrians crossing the The Federal Highways Administration (FHWA) highway. maintains a series of warrants to evaluate the need for a GSPC including traffic volume, pedestrian volume, and other geometric considerations. Preliminary indications are that a GSPC would not be warranted within the WCT project. For example, the minimum roadway volume threshold is 25,000 to 35,000 vehicles per day (vpd) depending on the urban context and travel speed. Since the existing daily volume on Honoapiilani Highway is roughly 13,000, and the projected daily volume with project buildout is approximately 21,000 vpd, a GSPC is not expected to be warranted.
- Pedestrian bridges and underpasses may be less desirable to women, the elderly, bicyclists, and the disabled. Pedestrian bridges and underpasses must be designed to meet the requirements of the Americans with Disability Act (ADA), which includes the provision of travel paths that have maximum grades to minimize excessive travel effort. For locations with no natural grade differences across a roadway, this requires the provision of ramps that substantially increase the walking or bicycling distance at a GSPC. This can discourage use of the GSPC and encourage at-grade crossings, even if no separate accommodations are provided at the street intersection. In addition, perceived safety concerns can discourage the use of a GSPC. Loitering, especially during evening hours, has been identified as a safety and security concern associated with underpasses.
- A pedestrian bridge may not be compatible with the desired country town setting. A pedestrian bridge over the Honoapiilani Highway would likely be required to provide at least 16 feet of vertical clearance for emergency vehicles, which would produce a structure that may exceed 20 feet in height. Such a structure may not be compatible with the desired country town setting.

• Pedestrian bridges and underpasses are very expensive to construct. It is estimated that such a facility would cost several millions of dollars to design and construct. In consideration of the relatively light volume of pedestrian traffic that would likely use such a facility located south of the signalized intersection, such a large expenditure is difficult to justify.

Note that the Applicant is working with the State DOT to ensure that pedestrians are provided safe crossing opportunities of the Honoapiilani Highway. During the design of any future plans, strategies will be employed to direct pedestrians to crossings that are controlled, and to discourage uncontrolled crossings of the highway. At controlled crossings, the Applicant will work closely with DOT to implement measures that enhance pedestrian safety, such as providing extended crossing times, leading pedestrian indications (LPIs), utilizing audible devices, and additional lighting and signage. At these intersections, the applicant will also work with DOT to incorporate design elements that will moderate vehicle traffic speeds and minimize crossing distances such as adjusting curb radii and utilizing medians, center refuge islands, and corner bulb-outs as appropriate. Along the highway, physical barriers, such as appropriate landscape hedging or visually appropriate fencing, will be utilized to discourage uncontrolled crossings of the highway.

3. The Applicant shall consider including "visitability guidelines" into project architecture for those dwelling units built with the intent of "aging in place."

*Applicant Response*. The Applicant will consider including "visitability guidelines" into project architecture for those dwelling units built with the intent of "aging in place." The Applicant understands that visitability guidelines include the following types of measures:

- Providing a one zero-step entrance into a residence;
- Incorporating doors with a minimum of 32 inches of clear passage space; and
- Providing access to a half bath or full bath on the ground floor with which meets ADA standards.

Thank you very much for your interest in Waikapu Country Town. Should you have any questions, please contact me at (808) 269-6220 or by e-mail at msummers@planningconsultantshawaii.com.

Sincerely yours,

Midecel J Summer

Michael J. Summers President

Attachment

c: Mr. Michael Atherton Mr. Albert Boyce



Figure 1 Study Area and Analyzed Intersections

**EXHIBIT 26** 



STATE OF HAWAII DEPARTMENT OF TRANSPORTATION 869 PUNCHBOWL STREET HONOLULU, HAWAII 96813-5097

August 7, 2018

Ms. Michele Chouteau McLean Director County of Maui Department of Planning 2200 Main Street, Suite 315 Wailuku, Hawaii 96793

Attention: Kurt Wollenhaupt

Dear Ms. McLean:

Subject: Waikapu Country Town (WCT) Community Plan Amendment (CPA 2018/0004) Change in Zoning (CIZ 2018/0004) Waikapu, Maui, Hawaii TMK: (2) 3-6-002:003 (Por.); 3-6-004:003 (Por.), 006; 3-6-005:007; 3-6-006:036

The State of Hawaii, Department of Transportation (HDOT) has reviewed the subject documents and has the following comments to provide:

#### Highways Division (HDOT-HWY)

Please accept our apologies, but due to the shortened review period HDOT-HWY unfortunately has not fully completed their review of the Change in Zoning and Community Plan Amendment applications, and the additional Traffic Impact Analysis Report memorandum addendum for Phase I (No Waiale Extension). Additional comments will be forthcoming and provided in a separate letter directly from HDOT-HWY.

At this time, HDOT-HWY's provides the following initial comments:

- 1. HDOT-HWY and the Maui County are currently engaging in continued discussions to assess whether the construction of the County's Waiale Extension should be required as it relates to the development's potential traffic impacts onto the nearby roadway system.
- 2. The Developer shall carry out all required and recommended improvements, to include lands for Right-of-Way (ROW) to mitigate the project's local traffic and regional impacts.

JADE T. BUTAY DIRECTOR

Deputy Directors ROY CATALANI ROSS M. HIGASHI EDWIN H. SNIFFEN DARRELL T. YOUNG

IN REPLY REFER TO: STP 18-077 STP 8.2485



Ms. Michele Chouteau McLean August 7, 2018 Page 2 STP 18-077 STP 8.2485

- 3. The Developer should provide its regional fair share at a minimum, but not limited to, improvements and any necessary lands for ROW for the following:
  - 1. Kuihelani Highway Study Intersections Nos. 4 and 8.
  - 2. Honoapiilani Highway Study Intersections Nos. 1 and 5.
- 4. The Developer should provide the entire cost (local) for the improvements and necessary lands for the ROW for the Honoapiilani Highway Study Intersection Nos. 9, 11, and 13.
- 5. The Petitioner for Land Use District Boundary Amendment, Land Use Commission (LUC) Docket No. A15-798 which pertain to the lands of the subject project, has agreed in their response letter dated December 12, 2016, that additional land fronting Honoapiilani Highway will be provided for potential future widening and other improvements. The HDOT prefers that the developer provide the land for roadway setback (and later dedicate) to the State.
- 6. The access locations as proposed for Honoapiilani Highway Intersections Nos. 9, 11 and 13 are reasonable and has been agreed to by HDOT-HWY.
- 7. The Petitioner shall comply with Condition No. 8 (a) and (b) of the Decision and Orders under LUC Docket No. A15-798 as stated below:

Condition No. 8: Transportation Highways

- (a) Petitioner shall submit to the State Department of Transportation and the County of Maui for review and approval a supplemental analysis to evaluate the "No Waiale Bypass" with Petitioner's Project in 2022 (Phase I), due to the current memorandum/addendum limited only to build-out year 2026 (Phase II). Petitioner shall also submit copies to OP, Maui County Planning Department, and the Commission.
- (b) Petitioner shall mitigate all Project-generated traffic impact as recommended and/or required by the State Department of Transportation and the County of Maui. Petitioner shall initiate, coordinate, and meet with State Department of Transportation Highways and the County of Maui to agree upon the regional pro-rata share and to develop a Memorandum of Agreement with the State Department of Transportation, Highway Division, and another Memorandum of Agreement with the County of Maui. The Memorandum of Agreement shall be executed prior to submittal of a subdivision application to the County of Maui.

Ms. Michele Chouteau McLean August 7, 2018 Page 3

#### Airports Division (HDOT-A)

HDOT-A respectively offers the following comments to provide a more focused guidance on complying with the LUC's decision and order regarding HDOT-A development requirements. We request that the Developer grant to the State an Avigation Easement that addresses all HDOT-A requirements in lieu of requiring a Memorandum of Agreement (MOA) and not in addition to requiring an MOA.

WCT is required to grant an avigation easement to the HDOT-A as a condition to obtaining LUC's approval of land use and County zone changes for the WCT. The grant of easement gives HDOT-A the right to impose restrictions and special conditions on and above WCT for the purpose of compliance with Federal Aviation Administration or other relevant government agency's guidelines and regulations that may hinder aircraft passage and/or airport operations at Kahului Airport (OGG). Such restrictions and special conditions shall be documented in an appropriate document following the format prescribed by HDOT-A, and will include, but not all inclusively, the following:

- 1. <u>Right of Flight</u>. There is hereby reserved to HDOT-A, its successors and assignees, for the use and benefit of the public, a right of flight for the passage of aircraft in the airspace above the surface of the WCT's lands, together with the right to cause in said airspace such noise, emissions and vibrations as may be inherent in the operation of aircraft, now known or hereafter used for navigation of or flight in the air, using said airspace, or landing at, taking off from, or operating at OGG.
- 2. <u>No Interference</u>. The WCT, expressly agrees for itself, its successors, and assignees that it will not make use, nor permit the use of the WCT's lands in any manner that might interfere with the flight of, or landing and taking off, of aircraft to/from OGG, or which might otherwise constitute an airport hazard, including wildlife hazards (e.g., development features that create a potential for attracting birds or other wildlife which may pose a hazard to flights or airport operation), or cause glint and glare or electrical magnetic interference with radio communication between any installation upon the airport and aircraft, or as to make it difficult for fliers to distinguish between airport lights and others, or as to impair visibility in the vicinity of the airport, or as otherwise to endanger the landing, taking off, or maneuvering of aircraft. In the event this condition is breached, HDOT-A, its successors and assignees, reserve the right to enter on the WCT's land and cause the abatement of such interference at the sole liability, cost and expense of the WCT, recipient, or successor.

Ms. Michele Chouteau McLean August 7, 2018 Page 4

- 3. <u>No Obstructions</u>. The WCT expressly agrees for itself, its successors and assignees that it will not erect nor permit the erection of any structure, objects of natural growth or other obstructions, on the subject lands, above a height that is not in accord with the requirements of Title 14 Code of Federal Regulations Part 77, and in accordance with the Airport Zoning Map, as provided by HDOT-A. In the event this condition is breached, HDOT-A, its successors and assigns, reserve the right of entry onto the WCT land hereunder to remove the offending structure or object, and to cut the offending natural growth, all of which shall be at the expense of WCT, its successors and assignees. This public right includes the right to mark or light as obstructions to air navigation, any and all buildings, structures, poles, trees, or other object that may at any time project or extend above said surfaces.
- 4. <u>Compatible Land Use</u>. The WCT pledges for itself, its successors and assignees to ensure that the use, reuse and development of the WCT lands remains compatible with the airport and aircraft operations so the airport's utility to civil aviation are not impaired or restricted.

If there are any questions, please contact Mr. Blayne Nikaido of the HDOT Statewide Transportation Planning Office at telephone number (808) 831-7979, or by email at blayne.h.nikaido@hawaii.gov.

Sincerely,

JADE T. BUTAY Director of Transportation



Land Use Planning • Sustainability Services • Community Planning • Development Permits

August 10, 2018

Mr. Jade T. Butay Director of Transportation State of Hawaii Department of Transportation 869 Punchbowl Street Honolulu, Hawaii 96813-5097

Dear Mr. Butay:

Re: Waikapu Country Town Community Plan Amendment and Change in Zoning Applications Prepared for Property Located at Waikapu, Maui, Hawaii; TMK Nos: (2) 3-6-002:001, (2) 3-6-002:003, (2) 3-6-4:003, (2) 3-6-004:006, (2) 3-6-005:007 and (2) 3-6-006:036.

Thank you for your letter dated August 7, 2018, which provides comments in response to the above-referenced applications. In response to the Highway Division's comments, please find the following responses:

- 1. *Waiale Extension.* The Applicant understands that the State and County are still assessing the project's traffic impacts and potential mitigations, which may include making a pro-rata share cost contribution towards the Waiale Bypass and/or other off-site improvements.
- 2. *Project Impacts and Traffic Mitigation Response*. The Applicant understands that the project will be responsible for its fair-share improvements to mitigate the project's transportation impacts to the State Highway system, which may include costs for land and improvements.
- 3. *Intersections Nos. 1, 4, 5, and 8*. The Applicant understands that the project will produce impacts to the above-referenced intersections. As

2331 West Main Street, Wailuku, HI 96793 • Ph. 808-244-6231 msummers@planningconsultantshawaii.com Mr. Jade T. Butay Director of Transportation State of Hawaii State Department of Transportation RE: Waikapu Country Town CPA & CIZ Application August 10, 2018 Page 2

> such, the Applicant looks forward to working with State DOT to define the project's pro-rata fair-share mitigations to address the project's impacts at these intersections.

- 4. Intersections 9, 11, and 13. The Applicant acknowledges that the Applicant will be responsible for the land and improvements to develop Intersection Nos. 9 and 13. As discussed at an August 9, 2018, meeting with State DOT Highway Division representatives and the County of Maui's Planning Department and Public Works Department, the Applicant understands that DOT and the County of Maui prefer that Intersection No. 11 be removed from the project plans in order to mitigate vehicular delays along the highway. As such, Intersection No. 11 will be removed and the project plans adjusted accordingly.
- 5. Honoapiilani Highway Widening fronting the Project Site. The Applicant acknowledges that the State DOT desires additional rightof-way fronting the project site for future highway improvements. As such, any building structures fronting the highway will be setback sufficiently to accommodate for the planned highway widening.
- 6. Access Locations at Intersections 9, 11, and 13. The Applicant acknowledges that DOT has determined that the above-referenced intersections are reasonable access points to the project site. However, as discussed at an August 9, 2010 meeting with State DOT Highway Division representatives and the County of Maui's Department of Planning and Public Works Department, the Applicant understands that DOT and the County of Maui prefer that Intersection 11 be removed from the project plans in order to mitigate vehicular delays along the highway. As such, Intersection 11 will be removed and the project plans adjusted accordingly.
- 7. Land Use Commission Conditions 8 (a) and (b). Condition 8 (a) required the Applicant to prepare an interim phase analysis of the project without the Waiale Bypass. That study was completed and transmitted to the State DOT and Maui County Department of Public Works on July 10, 2018.

Mr. Jade T. Butay Director of Transportation State of Hawaii State Department of Transportation RE: Waikapu Country Town CPA & CIZ Application August 10, 2018 Page 3

> Condition 8 (b) requires the Applicant to enter into Memorandum of Agreements (MOAs) with the State DOT and the County of Maui Department of Public Works to mitigate the project's traffic impacts through pro-rata share contributions. The Applicant looks forward to working with each agency to complete the required MOAs.

In response to the Airports Division's comments, please find the following response:

8. Airports Division Concerns. The Applicant is aware of the Airport Division's concerns that air traffic be protected from wildlife hazards, glint and glare, electrical magnetic interference, radio traffic interference and other forms of potential land use impacts. Land Use Commission Condition No. 10 requires that the Applicant enter into a Memorandum of Agreement with the State Department of Transportation before final subdivision approval of the initial phase of on-site development to develop measures to be taken to address potential impacts. The Applicant looks forward to working closely with the Airports Division to address the Division's concerns.

Thank you very much for your interest in this important Central Maui project. Should you have any questions, please contact me at (808) 269-6220 or by e-mail at msummers@planningconsultantshawaii.com.

Sincerely yours,

Michael & Summer

Michael J. Summers President

Attachment c: Mr. Michael Atherton Mr. Albert Boyce

# Fehr / Peers

## MEMORANDUM

Subject:	Waikapu Country Town Project – Analysis of 2022 Conditions without the Waiale Bypass
From:	Netai Basu & Ryan Liu, Fehr & Peers
То:	Mike Summers, Planning Consultants Hawaii, LLC
Date:	June 29, 2018

SD13-0085.02

In December 2016 the Hawaii Land Use Commission conducted a hearing on the Waikapu Country Town (WCT) project. Following certification of the EIS at the hearing, a series of conditions were set forth as part of the "Findings of Fact, Conclusions of Law, and Decision and Order and Certificate of Service," dated February 27, 2018. Condition 8a requires the "preparation of "a supplemental analysis to evaluate the "No Waiale Bypass" with Petitioner's Project in 2022 (Phase 1), due to the current memorandum/addendum limited to only build-out year (2026)". This memorandum is intended to fulfill this condition.

Considerable coordination between the County of Maui (County), Hawaii Department of Transportation (HDOT) and the project team early in the preparation of the Transportation Impact Analysis Report (TIAR) for the Waikapu Country Town Project (WCT, project) led to the decision to assume the completion of the planned Waiale Bypass in the study's future analysis scenarios. The Waiale Bypass is a planned extension of Waiale Road approximately one mile between its existing terminus at Waiale Road & Waiko Road to a new intersection with Honoapiilani Highway, and is the subject of a completed Environmental Assessment.<sup>1</sup> The roadway extension would provide supplemental access to the makai area of the WCT project site via a proposed roundabout with Main Street and a three-legged intersection with the major North-South Residential Street. The

<sup>&</sup>lt;sup>1</sup> Final Environmental Assessment for the Proposed Waiale Road Extension and East Waiko Road Improvements (prepared for County of Maui by Munekiyo & Hiraga, Inc., 2014)

Mike Summers June 29, 2018 Page 2 of 12



bypass received \$18,000,000 in funding in the County's FY2019 CIP<sup>2</sup> for years from 2020 to 2024, but the precise schedule for construction of this roadway is uncertain.

Fehr & Peers has developed and analyzed forecast traffic volumes in 2022 without the Waiale Bypass in place, both before and after the addition of project traffic. These traffic volumes were then used to conduct a full quantitative (LOS) analysis of these two future no-bypass scenarios. The results of the analysis are summarized in this memorandum.

### FUTURE TRAFFIC PROJECTIONS

Estimates of the future traffic conditions made as part of the draft and final EIS that employed the Maui Travel Demand Forecasting Model. Traffic volumes forecasts for 2026 throughout the study and across key screen lines, without and with the Waiale Bypass in place, were compared to identify the magnitude and location of traffic shifts without the planned roadway in place. That information was used to inform manual adjustments that modified the year 2022 forecasts to reflect the exclusion of the Waiale Bypass. The resulting cumulative base traffic volumes and the anticipated lane configurations, representing future conditions without the project and the bypass for year 2022 is presented in **Figure 1**.

#### 2022 NO PROJECT VOLUME COMPARISON

A comparison of the 2022 No Project peak hour volumes with and without the Waiale Bypass showed that the traffic that was projected to use the roadway extension would shift to use Honoapiilani Highway and Kuihelani Highway between Waiko Road and the intersection of Honoapiilani Highway and Kuihelani Highway. Details of the shift in traffic volumes under the 2022 No Project, No Bypass Condition are summarized below:

• During the AM peak hour, approximately 200 additional northbound trips and approximately 65 additional southbound trips would traverse along Honoapiilani Highway.

<sup>&</sup>lt;sup>2</sup> Adopted May 29, 2018, this project is listed on see page 15 of Appendix B of the *Fiscal Year 2019 Capital Program.* <u>https://mauicounty.legistar.com/View.ashx?M=F&ID=6265935&GUID=D27EADA0-E1D5-4531-9B7B-83237CA166C5</u>, accessed June 20, 2018.

Mike Summers June 29, 2018 Page 3 of 12



- Along Kuihelani Highway it is projected that there would be approximately 100 additional northbound trips and approximately 120 additional southbound trips traversing through this portion of the study area under in the AM peak hour.
- During the PM peak hour, approximately 60 additional northbound trips and approximately 200 additional southbound trips would traverse along Honoapiilani Highway.
- Along Kuihelani Highway it is projected that there would be approximately 120 additional northbound trips and approximately 80 additional southbound trips traversing through this portion of the study area under in the PM peak hour.

#### PROJECT TRAFFIC PROJECTIONS

Using the same trip generation and trip distribution pattern presented in the TIAR, the project trips were assigned to the 2022 roadway network without the Waiale Bypass. The trip assignment differs from the TIAR as trips to/from land uses on the makai side that were originally expected to travel on Waiale Road were shifted to travel over the site's internal roadways (i.e. Main Street, E-W Residential Road, and N-S Residential Road) to reach Honoapiilani Highway. **Figure 2** illustrates the net new 2022 project generated traffic volumes under full buildout for the AM and PM peak hours at each study intersection.

The project generated traffic volumes (Figure 2) were then added to the 2022 base traffic projection (Figure 1) to develop 2022 plus Project traffic forecasts for the no-bypass scenario shown in **Figure 3**.

#### KEY STREET SYSTEM CHANGES

In addition to using the revised traffic projections in the 2022 intersection operations analysis, there have been changes to the baseline street system assumptions since the completion of the draft EIS, as well as changes to the project street system assumptions due to the removal of the Waiale Bypass that have been applied to the analysis presented in this memorandum. Described below are the key changes in study intersection configuration used in this analysis:

Mike Summers June 29, 2018 Page 4 of 12



- <u>Intersection 3: S. Kamehameha Avenue & Maui Lani Parkway:</u> A roundabout is planned to replace the all-way stop control intersection. This intersection control modification was used in the revised 2022 intersection operations analysis with and without the project.
- <u>Intersection 6: Waiko Road & Waiale Road</u>: Signalization and construction of the fourth (south) leg of this intersection are part of the Waiale Bypass improvement. Since this analysis evaluates no-bypass scenarios, the existing control and configuration were assumed to remain in place in the 2022 operations analysis.
- Intersection 9: Honoapiilani Highway & Main Street: This future intersection will be constructed as part of the project. Due to the increase in volumes at this location without the Waiale Bypass in place, the intersection configuration has been revised from what was assumed in the TIAR in order to yield desirable operating conditions (i.e. minimum LOS D or better). Thus, this analysis assumes that the intersection is configured with one leftturn lane, one through lane, and one right-turn lane across all approaches. Signal phasing is assumed to be protected/permitted across all approaches and there would be an overlap phase for the westbound right-turn.
- Intersection 10: Waiale Road & Main Street This intersection will not exist if the Waiale Bypass is not constructed.
- Intersection 11: Honoapiilani Highway & East-West Residential Street This intersection would not be constructed in Phase 1 of the WCT project.
- Intersection 12: North-South Residential Street & Waiale Road This intersection would not be constructed in Phase 1 of the WCT project.
- Intersection 13: Honoapiilani Highway & Waiale Road This intersection will not exist if the Waiale Bypass is not constructed.

## INTERSECTION ANALYSIS

The intersection operations analysis compares the projected levels of service at each study intersection under cumulative conditions for 2022 with and without the proposed project and the Waiale Bypass. Results of this analysis are presented in **Table 1**.



#### 2022 NO PROJECT TRAFFIC CONDITIONS

The results of the LOS calculations indicate that all of the future study intersections operate at an overall desirable LOS (LOS D or better) under 2022 No Project Conditions, with the exception of the following locations:

- Intersection 1: Honoapi'ilani Highway & Kuikahi Drive (LOS F AM peak hour and LOS E PM peak hour)
- Intersection 3: S. Kamehameha Avenue & Maui Lani Parkway (LOS F AM and PM peak hours)
- Intersection 4: Kuihelani Highway & Maui Lani Parkway (LOS F AM peak hour and LOS E – PM peak hour)
- Intersection 6: Waiale Road & Waiko Road (LOS F AM peak hour)
- Intersection 7: S. Kamehameha Avenue & Waiko Road (LOS F AM peak hour)
- Intersection 8: Kuihelani Highway & Waiko Road (LOS E AM peak hour)

When compared to the 2022 No Project results presented in the TIAR, Intersection 2: Wialae Road & Kuikahi Drive would operate at LOS D in the AM peak hour, rather than at LOS E. Intersection 6: Waiale Road & Waiko Road and Intersection 8: Kuihelani Highway & Waiko Road are new locations that would operate at undesirable LOS if the Waiale Bypass is not in place.

#### 2022 WITH PROJECT TRAFFIC CONDITIONS

The proposed project would contribute to cumulative impacts (where LOS E or LOS F is forecast under pre-project conditions) during one or both of the peak hours at the six study intersection listed in the previous section. In addition, project-specific impacts have been identified at two intersections where the addition of project-generated traffic would cause their overall intersection operations to fall below LOS D in one or both peak hours:

- Intersection 2: Waiale Road & Kuikahi Drive
- Intersection 5: Honoapi'ilani Highway & Waiko Road

The results of this no-bypass analysis show that the impacts at Intersections 5, 6 and 8 would be new impacts in 2022, as they were not identified as impacted in the TIAR under 2022 with Project conditions.

### POTENTIAL TRAFFIC IMPROVEMENTS

This section describes physical roadway improvements (mitigations) that would be necessary to achieve LOS D or better following completion of Phase 1 of the WCT project in 2022 if the Waiale Bypass were not yet constructed. Mitigation measures described in the draft and final EIS were first applied to the impacted locations and others were investigated as necessary. The emphasis was to identify physical and/or operational improvements that could be implemented within the existing or planned roadway rights-of-way when possible. **Table 1** summarizes the projected LOS in 2022 at the impacted locations with these proposed measures in place.

The full range of improvements that address both project-related and/or cumulative traffic impacts are discussed in detail below.

Intersection 1: Honoapi'ilani Highway & Kuikahi Drive – The addition of a second southbound left-turn lane would fully mitigate the impact under 2022 under the no-bypass scenario. The southbound approach would be widened from the a left-turn lane, a through lane, and a right-turn lane to two left-turn lanes, a through lane, and a right-turn lane. To complement the addition of a second southbound left-turn lane, the east legs of the intersection would need to be widened to provide a second departure lane. Signal modifications at this intersection would include protected phasing on the southbound approach and right-turn overlap phasing on the westbound and northbound approaches. Additional right-of-way may be needed on Honoapiilani Highway and on Kuikahi Drive to fully implement this improvement.

Intersection 2: Waiale Road & Kuikahi Drive – The impact at this intersection could be mitigated under the no-bypass scenario by widening the eastbound and westbound approaches to provide a left-turn lane, two through lanes, and a right-turn lane. To complement the widening of the eastbound and westbound approaches, both the eastbound and westbound departures would also need to be widened to each provide a second receiving lane.

Intersection 3: S. Kamehameha Avenue & Maui Lani Parkway – The impact at this intersection could be improved to pre-project LOS under the no-bypass scenario by installing a traffic signal and widening the eastbound and westbound approaches on Maui Lani Parkway from a single lane to provide one left-turn lane and one shared through/right-turn lane. To fully mitigate to LOS D or better, it would also be necessary to widen the southbound approach on Kamehameha Avenue

Mike Summers June 29, 2018 Page 7 of 12



from one left-turn lane and one shared through/right-turn lane to provide one left-turn lane, one through lane and one right-turn lane.

<u>Intersection 4: Kuihelani Highway & Maui Lani Parkway</u> – The impact at this intersection could be mitigated (LOS D or better) under the no-bypass scenario by widening the eastbound approach to provide a left-turn lane and a shared left-turn/through/right-turn lane.

Intersection 5: Honoapi'ilani Highway & Waiko Road – This intersection is a new impact not previously identified in the Draft and Final EIS. The impact at this intersection could be fully mitigated under the no-bypass scenario by widening the northbound approach from a left-turn lane and a shared through/right-turn lane to provide a left-turn lane, a through lane, and a shared through/right-turn lane. The northbound approaches to provide a left-turn lane and a shared through/right-turn lane. The northbound departure of the highway would require widening for a minimum of approximately 250 feet to provide a second receiving lane, which would transition back into the existing single northbound lane. Additional right-of-way may be needed on both Honoapiilani Drive and Waiko Road to fully implement this improvement, which would result in LOS D or better operations at an overall intersection level.

<u>Intersection 6: Waiale Road & Waiko Road</u> – The impact at this intersection is a new impact not previously identified in the Draft and Final EIS. Under the no-bypass scenario, it could be fully mitigated with the installation of a traffic signal, which was assumed to be in place in the Cumulative, pre-project condition in the TIAR due to its key location on the planned Waiale Bypass.

<u>Intersection 7: S. Kamehameha Avenue & Waiko Road</u> – The impact at this intersection could be fully mitigated by using the improvement presented in the TIAR, which is installing a traffic signal with permitted phasing at all approaches.

<u>Intersection 8: Kuihelani Highway & Waiko Road</u> – The impact at this intersection could be mitigated using the improvement presented in the Draft and Final EIS, which is widening and restriping the eastbound approach to provide a left-turn lane and a right-turn lane.

Mike Summers June 29, 2018 Page 8 of 12



### CONCLUSION

This memorandum documents analysis conducted to assess project-related and cumulative impacts following completion of Phase 1 the proposed Waikapu Country Town project if the planned Waiale Bypass were not constructed by 2022. While three more study intersections would be significantly impacted under this scenario than in the "with Bypass" scenario analyzed in the TIAR as part of the Draft EIS, the desired intersection level of service standard (LOS D) can be achieved at the all analyzed locations with an expanded program of roadway improvements to which the project would contribute its fair share as mitigation.



1. Honoaplitani Hwy/Kulkahi Dr	2. Walale Rokulkahi Dr	3 S: Kemehameha Ave/Maul Lani Pkwy	4. Kulhelani HwyMaut Lani Pkwy	5. Honoaphilani HwynWaiko Rd			
20(20) 30(20) 10(20	40(319) 340(319) 579(40)→ 770(50)→ 70(50)→	121(250) 121(2	(2011) (1				
6. Walale Rd/Walko Rd	7, S. Kamehameha Ave/Waiko Rd	8. Kuihelani HwyWaiko Rd	9. Honospillani Hwy/Main St	10. Waláte Rd/Main St			
8 8 8 8 8 8 8 8 8 8 8 8 8 8	(130(13)) (130(13))		(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	Intersection does not exist without the Woiale Byposs			
11. Honoaphilani Hwy/E-W Residential St	12. North-South Residential St/Waiale Rd	13. Honcapiliani Hwy/Walale Rd	1d. Honospillani Hwy/Kuihelani Hwy				
6 263010 - → Co56883	Intersection does not exist without the Waiale Bypass	+ 516839 + 916839					

Figure 1 Peak Hour Traffic Volumes and Lane Configurations 2022 Baseline With No Bypass Conditions



State     State <th< th=""><th>1. Honoaprilani Hwy/Kulkahi Dr</th><th>2, Walale Rd/Kuikahi Dr</th><th>3. S. Kemehameha Ave/Maul Lani Pkwy</th><th>4. Kuihelani Hwy/Maul Loni Pkwy</th><th colspan="4">5. Honoapi/lani Hwy/Waiko Rd</th></th<>	1. Honoaprilani Hwy/Kulkahi Dr	2, Walale Rd/Kuikahi Dr	3. S. Kemehameha Ave/Maul Lani Pkwy	4. Kuihelani Hwy/Maul Loni Pkwy	5. Honoapi/lani Hwy/Waiko Rd			
6, Waske RatMatio Rd 7. S. Kamelaansha Ave/Vasko Rd 8. Kulletori Hwy/Walio Rd 9. Horioaphani Hwy/Main St 10. Waiske RatMatin St   1 2003110 1981030 33807529 10. Kulletori Hwy/Walio Rd 9. Horioaphani Hwy/Main St 10. Waiske RatMain St   1 10. Kulletori Hwy/Walio Rd 1. Kulletori Hwy/Walio Rd 9. Horioaphani Hwy/Main St 10. Waiske RatMain St   1 10. Kulletori Hwy/Walio Rd 1. Kulletori Hwy/Walio Rd 11. Horioaphani Hwy/Kalin St 10. Waiske RatMain St   1 10. Kulletori Hwy/Kalin Rd 11. Horioaphani Hwy/Kalin Rd 11. Horioaphani Hwy/Kalin St 10. Waiske RatMain St   1 10. Kulletori Hwy/Kalin Rd 11. Horioaphani Hwy/Kalin Rd 11. Horioaphani Hwy/Kalin Rd 11. Horioaphani Hwy/Kalin Rd   1 10. Kulletori Hwy/Kalin Rd 12. Nofth-South Residential St 11. Horioaphani Hwy/Kalin Rd 14. Horioaphani Hwy/Kalin Rd   1 1. Horioaphani Hwy/Kalin Rd 12. Nofth-South Residential St 12. Nofth-South Residential St 11. Horioaphani Hwy/Kalin Rd   1 1. Horioaphani Hwy/Kalin Rd 12. Nofth-South Residential St 11. Horioaphani Hwy/Kalin Rd 14. Horioaphani Hwy/Kalin Rd   1 1. Horioaphani Hwy/Kalin Rd 12. Nofth-South Residential St 12. Nofth-South Residential St 11. Horioaphani Hwy/Kalin Rd   1 1. Horioaphani Hwy/Kalin Rd 12. Nofth-South Residential	99(200) 1000 10	400(776) 70(50) 70(50)	210(80) 210(80) 210(20) → 402(27) 70(30) 170(294) 375(45) → 170(159) 170(159)	(1995) (1995) (1995) 1995) 1000 100				
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	8, Waisle RdWaiko Rd	7. S. Kamehanisha Ave/Walko Rd	8. Kuihelani HwyWaiko Ro	9. Honoapi'ilani Hwy/Main St	10. Walate Rd/Main St			
11. Honospitani Hwy/EW Residential St. 12. Notin-South Residential St. Vialide Rd . 13. Honospitani Hwy/Haide Rd . 14. Honospitani Hwy/Haide Rd . 15. Notin South Residential St. 12. Notin South Residential St. 13. Honospitani Hwy/Haide Rd . 14. Honospitani Hwy/Haide Rd . 14. Honospitani Hwy/Haide Rd . 14. Honospitani Hwy/Haide Rd . 15. Notin South Residential St. 12. Notin South Resi	2500/210) → → → → → → → → → → → → → → → → → → →	134(103) 134(1	5x40440 25491450 5x40440 5x404 5x404 5x40 5x40	Silipiziti Silipiziti	Intersection does not exist without the Woiole Bypass			
Intersection does not exist ↓	1t. Honosprilani Hwy/E-W Residential St	12, North-South Residential StrWalale Rd	13. Honoapiliani Hwy/Waiale Rd	14. Honoapiltani Hwy/Kuihelani Hwy	· · · · · · · · · · · · · · · · · · ·			
	← 68(0'1)/85	Intersection does not exist without the Woiale Bypass						

Figure 2 Peak Hour Traffic Volumes and Lane Configurations Year 2022 With Project and No Bypass Conditions



٢

1.1 2015 1.1 2015 1		25855 41 414441 3000)→ 2555 000)→ 2555	888 711 888 711 888 711 711 888 711 888 711 888 711 711	000     ↓     ↓     000     ↓     ↓     000     ↓<
5. Watale Korwano Rd	7. S. Kamenamena Ave/Waiko Ko	8. Kuihelani Hwyyyvaiko kd	9, Honoaphiani Hwy/Main St	10. Wajale Rd/Main St
● <sup>1</sup>		ଞ୍ଚିଛୁ 411 ବ୍ୟା: ସ୍ଥ୍ୟ ସ୍ଥ୍ୟ ଅନ୍ତି	5509 115118	Intersection daes not exist without the Walale Bypass
11, Honoapi Jani Hwy/E/W Residental St	12. North-South Residential SIMalate Rd	13. Honoaphiant Hwy/Walale Rd	14. Honoapillani Hwy/Kuihelani Hwy	
(E1)02 → (6(1))	Intersection does not exist without the Waiale Bypass	564(c2) → →		

4

<u>т</u> 5.н

5

1 3 5 8

Figure 3 Peak Hour Traffic Volumes and Lane Configurations Net New Project Only, Phase 1 (2022)

ante de la 1990 - Serie 1995 - Serie				Year 2022 No Project Conditions w/o Walale Bypass		t Year 2022 with Project w/o Bypass			Mitigation Required?		Mitigated to:			
	Intersection	Traffic Control	Peak Hour					Delay Change		Impacted in the DEIS?	Pre-Project or Better Conditions (< LOS D)		LOS D or Better Conditions	
				Dei/Veh <sup>1</sup>	LOS <sup>2,3</sup>	Del/Veh <sup>1</sup>	LO5 <sup>23</sup>	ана Али – П		이 아내는 가지? 1997년 - 1997년 - 1997년 1997년 - 1997년 -	Del/Veh <sup>1</sup>	LOS23	Dei/Veh <sup>1</sup> LOS <sup>2,3</sup>	
1	Honoapi'ilani Highway / Kuikahi Drive	Signal	AM	87	F	108,8	F	21.8	YES	YES	52,1	D	Same as Pre-Project	
			PM	30.8	c	SS.2	E	24.4	YES	YES	38.6	D	Mitigation	
2.	Waiaie Road / Kuikahi Drive	Signal	AM	51:6	D	67.3	F	15.7	YES	YES	42.6	D	Same as Pre-Project	
			PM	43.4	D	63.2	E	19.8	YES	YES	38.6	D	Mitigation	
3.	5. Kamehameha Avenue / Maui Lani Parkway	Roundabout	AM	> 180	F	> 180	- E		YES	YES	54.7	D	75.9 E	
			PIM	148,8	2	> 180		14.1	YES	TES	18.7	ĉ	43.3 D	
4.	Kuihelani Highway / Maui Lani Parkway	Signal	DM	64.2		77 3		14.1	VES	VEC	20.9	ž	Allelanda -	
			AM	367	<b>D</b>	116.3	Ē	79.6	VES	ND	21.6	č	Same as Pre-Project	
5.	Honoapi'ilani Highway / Waiko Road	Signal	DM	21.1	č	74.2	F	53.1	VES	ND	24.7	č	Additionation	
	Contract of the second s		AM	137.1	Ē	>180	÷.	**	VES	ND	13.7	A	5ame as Pre-Project	
6.	Waiale Road / Waiko Road	555C	PM	28.2	'n	98.6	Ē	70.4	YES	ND	9.9	Ă	Mitigation	
_			AM	136.2	F	>180	F	**	YES	YES	16.2	8	Same as Pre-Project	
7.	5. Kamehameha Avenue / Walko Road	55SC	PM	31.7	D	146.6	F	114.9	YES	YES	8.8	Α	Mitigation	
	to de transferie de constation de set	<b>6</b> 1	AM	64.7	E	84.7	F	20,0	YES	YES	26	с	Same as Pre-Project	
8.	Kuinelani Highway / Walko Road	signai	PM	20.9	с	24.4	с	3.5	ND	ND	18.1	В	Mitigation	
	Henezei'ileni Hiskway (Main Street	Cienal	AM	Oolu built u	ith project	26.3	с	26.3	NO	NO		- Mitigation	Required	
э.	Honoaphani Highway / Walit Street	Signal	AM	Only built w	in project	30.0	с	30.0	ND	NO	IN IN	o wikigadon	Requireu	
10	White Good (Main Street	N/A	AM						Does not exist v	vithout				
10.	Walae Road / Walit Sueer	N/A	PM						Waiaie 8yp	8 <b>55</b>				
11	Honoani'ijani Hinbway / Fast-West Residential Street	Signal	AM					Oniv	built with Phase	2 of project				
	nonospinaninginay / continent concentral sincer	Jighti	PM					Unity	built milling	a or project				
12	North-South Residential Street / Waiale Road	5550	AM					Oniv	built with Phase	2 of project				
		2050	PM					0.11		a or project				
13	Honoagi'ilani Highway / Wajale Road	N/A	AM						Does not exist v	vithout				
	······		PM				_		Waiale Byp	855				
14.	Honoapi'ilani Highway / Kuihelani Highway	Signai	AM	20.9	c	22.0	c	1,1	NO	NO	N	o Mitigation	Required	
			PM	20.5	<u> </u>		<u> </u>	2.3	ND	<u>NO</u>			· · · · · · · · · · · · · · · · · · ·	
Source:	Fehr & Peers, 2018													

.

Notes: Multicated oversaturated conditions. Delay cannot be carculated. SSSC = Side-street stop-controlled intersection. Whole intersection weighted average stopped delay expressed in seconds per vehicle for signalized and all-way stop control intersections. The vehicular delay for the worst movement is reported for side street stop-controlled intersections. LOS calculations performed using the 2000 Highway Capacity Manual (HCM) method. Unacceptable LDS highlighted in **bold**.

# Fehr & Peers

## **MEMORANDUM**

Date:June 29, 2018To:Mike Summers, Planning Consultants Hawaii, LLCFrom:Netai Basu & Ryan Liu, Fehr & PeersSubject:Pro-Rata Share Calculations for Waikapu Country Town Project

SD13-0085.02

In December 2016 the Hawaii Land Use Commission conducted a hearing on the Waikapu Country Town (WCT) project. Following certification of the EIS at the hearing, a series of conditions were set forth as part of the "Findings of Fact, Conclusions of Law, and Decision and Order and Certificate of Service," dated February 27, 2018. One element of Condition 8b, below, is the calculation of the project's proportional share for traffic mitigation measures and regional improvements.

"8b. Petitioner shall mitigate all Project-generated traffic impacts as recommended and/or required by the State Department of Transportation and the County of Maui. Petitioner shall initiate, coordinate, and meet with State Department of Transportation Highways and the County of Maui to agree upon the regional pro-rata share and to develop a Memorandum of Agreement with the State Department of Transportation, Highways Division, and another Memorandum of Agreement with the County of Maui. The Memoranda of Agreement shall be executed prior to submittal of a subdivision application to the County of Maui."

This memorandum provides these calculations and is intended to be used as the parties involved continue to coordinate to fulfill Condition 8b.

The method for calculating the project's fair share contribution to traffic mitigation measures is described in the TIAR for the WCT project<sup>1</sup>. The first step is to calculate the total growth in peak hour trips at each intersection where a significant traffic impact was found. The second step is to calculate the portion of that growth which is attributable to the WCT project. The resulting percentages are reviewed for both the AM and the PM peak hours at each impacted location and the higher

<sup>&</sup>lt;sup>1</sup> Waikapu Country Town Transportation Impact Analysis Report (Appendix I to the Draft EIS) (Fehr & Peers, December 2016).
Mike Summers June 29, 2018 Page 2 of 7



proportion is determined to be the project's pro-rata share, or fair-share, contribution to the impact mitigation cost.

Tables 1 through 4 show the resulting calculations for each of the four scenarios that have been analyzed for the proposed WCT project.

- Full Buildout (Phase 1 and Phase 2) 2026 with Waiale Bypass
- Full Buildout (Phase 1 and Phase 2) 2026 without Waiale Bypass
- Partial Buildout (Phase 1) 2022 with Waiale Bypass
- Partial Buildout (Phase 1) 2022 without Waiale Bypass

Table 5 summarizes the pro-rata share calculations. These pro-rata share calculations can be applied to cost estimates for the recommended mitigation measures at each impacted location and then summed to determine an overall monetary contribution to mitigate the project's traffic impacts. Intersections that include a State highway are noted, allowing separate contribution totals to be calculated for the State highway system and on the County highway system.

TABLE 1 FAIR SHARE INTERSECTION TRAFFIC CONTRIBUTION - FULL BUILDOUT (PHASE 1 & PHASE 2) 2026 - WITH WAIALE BYPASS

	AM Peak Hour										
Int # /Intersection Name	Existing Traffic	2026 Projected Traffic	Project Only Traffic	Total New Traffic	Project % of New Traffic	Existing Traffic	2026 Projected Traffic	Project Only Traffic	Total New Traffic	Project % of New Traffic	Maximum Contribution
1 ** Honoapi'ilani Highway (SR 30) / Kuikahi Drive	2,073	3,238	318	1,165	27.3%	1,928	3,184	424	1,256	33.8%	33.8%
2 * Waiale Road / Kuikahi Drive	1,935	3,786	436	1,851	23.6%	1,849	3,627	507	1,778	28.5%	28.5%
3 * S. Kamehameha Avenue / Maui Lani Parkway	1,700	3,428	298	1,728	17.2%	1,593	3,173	353	1,580	22.3%	22.3%
4 ** Kuihelani Highway (SR 380) / Maui Lani Parkway	1,856	4,013	273	2,157	12.7%	2,011	4,150	330	2,139	15.4%	15.4%
7 * S. Kamehameha Avenue / Waiko Road	0	1,709	229	1,709	13.4%	0	1,629	289	1,629	17.7%	17.7%
8 ** Kuihelani Highway (SR 380) / Waiko Road	1,336	2,285	105	949	11.1%	1,407	2,242	122	835	14.6%	100% <sup>1</sup>
Note: This table is identical to Table 8 in Appendix I to the Draft EIS for the Walkopu Country Town project.  County of Maui jurisdiction  * State HDOT jurisdiction  Recause the intersection 8 is attributable to the project, rather than a project contribution to a cumulative impact, a 100% contribution is assumed for this intersection.											

TABLE 2 PROJECT FAIR SHARE INTERSECTION TRAFFIC CONTRIBUTION - FULL BUILDOUT (PHASE 1 & PHASE 2) 2026 - WITHOUT WAIALE BYPASS

	$\pi_{1}^{(n)} \pi_{2}^{(n)} = \sum_{i=1}^{n} \sum_{j=1}^{n} \sum_{i=1}^{n} \sum_{i=1}^{n} \sum_{i=1}^{n} \sum_{j=1}^{n} \sum_{i=1}^{n} \sum_{j=1}^{n} \sum_$	AN	i Peak Hou	ır	ana ang ing ing ing ing ing ing ing ing ing i	PM Peak Hour															
Int # Intersection Name	Existing Traffic	2026 Projected Traffic	Project Only Traffic	Total New Traffic	Project % of New Traffic	Existing Traffic	2026 Projected Traffic	Project Only Traffic	Total New Traffic	Project % of New Traffic	Maximum Contribution										
1 ** Honoapi'ilani Highway (5R 30) / Kuikahi Drive	2,073	3,653	543	1,580	34.4%	1,928	3,572	662	1,644	40.3%	40.3%										
2 * Waiale Road / Kuikahi Drive	1,935	3,518	348	1,583	22.0%	1,849	3,413	413	1,564	26.4%	26,4%										
3 * 5. Kamehameha Avenue / Maui Lani Parkway	1,700	3,310	180	1,610	11.2%	1,593	3,080	220	1,487	14.8%	14.8%										
4 ** Kuihelani Highway (5R 380) / Maui Lani Parkway	1,856	4,074	274	2,218	12.4%	2,011	4,231	331	2,220	14.9%	14.9%										
5 ** Honoapi'ilani Highway (5R 30) / Waiko Road	1,545	3,112	902	1,567	57.6%	1,418	3,072	1,102	1,654	66.6%	100% '										
6 * Waiale Road / Waiko Road	461	1,597	357	1,136	31.4%	375	1,386	436	1,011	43.1%	43.1%										
7 * 5. Kamehameha Avenue / Waiko Road	0	1,635	315	1,635	19.3%	0	1,444	384	1,444	26.6%	26.6%										
8 ** Kuihelani Highway (5R 380) / Waiko Road	1,336	2,595	225	1,259	17.9%	1,407	2,555	255	1,148	22.2%	22.2%										
13 ** Honoapi'ilani Highway (5R 30) / Kuihelani Highway (SR 380)	0	2,381	441	2,381	18.5%	0	2,474	574	2,474	23.2%	23.2%										
Source: Fehr & Peers, 2018																					
County of Maui jurisdiction																					
• State HDOT jurisdiction																					
Because the impact at intersection 5 is attributable to the project, rather than a project co	ntribution to a	cumulative imp	act, a 100% cc	ntribution is	assumed for th	is intersection					ecause the impact at Intersection 5 is attributable to the project, rather than a project contribution to a cumulative impact, a 100% contribution is assumed for this intersection.										

TABLE 3 FAIR SHARE INTERSECTION TRAFFIC CONTRIBUTION - PARTIAL BUILDOUT (PHASE 1) 2022 - WITH WAIALE BYPASS

	AM Peak Hour						PM Peak Hour				
Int # Intersection Name	Existing Traffic	2022 Projected Traffic	Project Only Traffic	Total New Traffic	Project % of New Traffic	Existing Traffic	2022 Projected Traffic	Project Only Traffic	Total New Traffic	Project % of New Traffic	Maximum Contribution
1 ** Honoapi'ilani Highway (SR 30) / Kuikahi Drive	2,073	3,013	263	940	28.0%	1,928	2,990	360	1,062	33.9%	33.9%
2 * Waiale Road / Kuikahi Drive	1,935	3,467	327	1,532	21.3%	1,849	3,357	387	1,508	25.7%	25.7%
3 * S. Kamehameha Avenue / Maui Lani Parkway	1,700	3,168	228	1,468	15.5%	1,593	2,922	272	1,32 <del>9</del>	20.5%	20.5%
4 ** Kuihelani Highway (SR 380) / Maui Lani Parkway	1,856	3,565	175	1,709	10.2%	2,011	3,771	221	1,760	12.6%	12.6%
7 * S. Kamehameha Avenue / Waiko Road	0	1,447	97	1,447	6.7%	0	1,392	142	1,392	10.2%	10.2%
Source: Fehr & Peers, 2018 • County of Maui jurisdiction •• State HDOT jurisdiction	. <u></u>										

 TABLE 4

 FAIR SHARE INTERSECTION TRAFFIC CONTRIBUTION - PARTIAL BUILDOUT (PHASE 1) 2022 - WITHOUT WAIALE BYPASS

	AM Peak Hour						PM Peak Hour				
Int # Intersection.Name	Existing Traffic	2022 Projected Traffic	Project Only Traffic	Total New Traffic	Project % of New Traffic	Existing Traffic	2022 Projected Traffic	Project Only Traffic	Total New Traffic	Project % of New Traffic	Maximum Contribution
1 ** Honoapi'ilani Highway (SR 30) / Kuikahi Drive	2,073	3,334	406	1,261	32,2%	1,928	3,277	505	1,349	37.4%	37.4%
2 * Waiale Road / Kuikahi Drive	1,935	3,228	256	1,293	19.8%	1,849	3,169	312	1,320	23.6%	100% <sup>1</sup>
3 * S. Kamehameha Avenue / Maui Lani Parkway	1,700	3,081	141	1,381	10.2%	1,593	2,866	178	1,273	14.0%	14.0%
4 ** Kuihelani Highway (SR 380) / Maui Lani Parkway	1,856	3,622	176	1,766	10.0%	2,011	3,848	222	1,837	12.1%	12.1%
5 ** Honoapi'ilani Highway (SR 30) / Waiko Road	1,545	2,757	585	1,212	48.3%	1,418	2,654	747	1,236	60.4%	100%'
6 * Waiale Road / Waiko Road	461	1,297	178	836	21.3%	375	1,079	236	704	33.5%	33.5%
7 * S. Kamehameha Avenue / Waiko Road	0	1,367	167	1,367	12.2%	0	1,203	218	1,203	18.1%	18.1%
8 ** Kuihelani Highway (SR 380) / Waiko Road	1,336	2,320	122	984	12.4%	1,407	2,321	141	914	15.4%	15.4%
Source: Fehr & Peers, 2018 • County of Maui jurisdiction •• State HDOT jurisdiction •• Secure the insert of letterections 2 and 5 are attributable to the preject of	athor than a pr	eiest sentributie		tivo impost	100% contrib	ution is because	and for this inter				

	With Phase 1	& Phase 2 (2026)	With Phase 1 (2022)				
int * intersection vame	With Walale Bypass	Without Wajale Bypass	With Waiale Bypass	Without Waiale Bypass			
1 ** Honoapi'ilani Highway (SR 30) / Kuikahi Drive	33.8%	40.3%	33.9%	37.4%			
2 * Waiale Road / Kuikahi Drive	28.5%	26.4%	25.7%	100.0%			
3 * S. Kamehameha Avenue / Maui Lani Parkway	22.3%	14.8%	20.5%	14.0%			
4 ** Kuihelani Highway (SR 380) / Maui Lani Parkway	15.4%	14.9%	12.6%	12.1%			
5 ** Honoapi'ilani Highway (SR 30) / Waiko Road	N/A	100.0%	N/A	100.0%			
6 * Waiale Road / Waiko Road	N/A	43.1%	N/A	33.5%			
7 * S. Kamehameha Avenue / Waiko Road	17.7%	26.6%	10.2%	18.1%			
8 ** Kuihelani Highway (SR 380) / Waiko Road	100% 1	22.2%	N/A	15.4%			
13 ** Honoapi'ilani Highway (SR 30) / Kuihelani Highway (SR 380)	N/A	23.2%	N/A	N/A			
Source: Fehr & Peers, 2018			<u> </u>				
* County of Maui jurisdiction							
** State HDOT jurisdiction							

TABLE 5
PROJECT FAIR SHARE INTERSECTION TRAFFIC CONTRIBUTION COMPARISON