

FILE COPY

MAR 23 2013



NEIL ABERCROMBIE
Governor

DANIEL E. ORODENKER
Executive Officer

LAND USE COMMISSION
Department of Business, Economic Development & Tourism
State of Hawai'i

March 5, 2013

Mr. Gary Gill, Acting Director
Office of Environmental Quality Control
235 South Beretania Street, Room 702
Honolulu, Hawaii 96813-2437

PROCEIVED
13 MAR -6 8:53
OFFICE OF ENVIRONMENTAL
QUALITY CONTROL

Dear Mr. Gill:

Subject: Docket No. A10-787/Maui R&T Partners, LLC
Final Environmental Impact Statement (FEIS) – Maui Research & Technology
Park Master Plan Update
Kihei, Maui, Hawaii

The State Land Use Commission hereby transmits the documents package for the subject FEIS for publication of a notice of availability in the next available edition of *The Environmental Notice* and for evaluation for acceptability under Hawaii Administrative Rules §11-200-20. Upon receiving verification from the OEQC, we will instruct the applicant to make the FEIS available to those on the distribution list.

Please find enclosed a completed OEQC Publication Form, two copies of the FEIS, an Adobe Acrobat PDF file of the FEIS, and an electronic copy of the publication form in MS Word.

Please feel free to contact Bert Saruwatari of my office at 587-3822 should you require clarification or any further assistance.

Sincerely,

DANIEL E. ORODENKER
Executive Officer

Enclosures

c: Benjamin M. Matsubara, Esq. (w/o enclosures)
Brett Davis (w/o enclosures)

**APPLICANT ACTIONS
SECTION 343-5(C), HRS
PUBLICATION FORM (JULY 2012 REVISION)**

Project Name: Maui Research and Technology Park Master Plan Update, Final EIS

Island: Maui

District: Makawao

TMK: TMK's (2) 2-2-024:1-9, 14-18, 31, 32, 34, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46 and (2) 2-2-002:54 (por.)

Permits: HRS Chapter 343 Compliance; State Land Use District Boundary Amendment; County Community Plan Amendment; County Change in Zoning; Section 404 Clean Water Act Approval; Air Pollution Control Permit; Community Noise Permit; NPDES Permit; Section 401 Clean Water Act; Well Construction and Pump Installation Permit; Stream Channel Alteration Permit; Permit to Perform work within the State ROW; Preliminary Subdivision Approval; Final Subdivision Approval; Grading and Grubbing Permit; Driveway Permit; Building Permit; Wastewater Discharge Permit; Drainage Approval; Easements for Utilities and Roadways

Approving Agency:

State of Hawaii, Land Use Commission

Address Department of Business Economic Development & Tourism
State of Hawaii
P.O. Box 2359
Honolulu, Hawaii 96804-2359

Contact & Phone Mr. Daniel E. Orodenker, Executive Officer (808) 587-3822

Applicant:

Maui R&T Partners, LLC.

Address 1300 North Holopono, Suite 201
Kihei, Hawaii 96753

Contact & Phone Mr. Steve Perkins (808)-270-5944

Consultant:

Chris Hart and Partners, Inc.

Address 115 N. Market St.
Wailuku, HI 96793

Contact & Phone Mr. Brett Davis, Planning Consultant (808) 242-1955

Status (check one only):

- __DEA-AFNSI Submit the approving agency notice of determination/transmittal on agency letterhead, a hard copy of DEA, a completed OEQC publication form, along with an electronic word processing summary and a PDF copy (you may send both summary and PDF to oeqchawaii@doh.hawaii.gov; a 30-day comment period ensues upon publication in the periodic bulletin.
- __FEA-FONSI Submit the approving agency notice of determination/transmittal on agency letterhead, a hard copy of the FEA, an OEQC publication form, along with an electronic word processing summary and a PDF copy (send both summary and PDF to oeqchawaii@doh.hawaii.gov; no comment period ensues upon publication in the periodic bulletin.
- __FEA-EISPN Submit the approving agency notice of determination/transmittal on agency letterhead, a hard copy of the FEA, an OEQC publication form, along with an electronic word processing summary and PDF copy (you may send both summary and PDF to oeqchawaii@doh.hawaii.gov; a 30-day consultation period ensues upon publication in the periodic bulletin.
- __Act 172-12 EISPN Submit the approving agency notice of determination on agency letterhead, an OEQC publication form, and an electronic word processing summary (you may send the summary to oeqchawaii@doh.hawaii.gov. NO environmental assessment is required and a 30-day consultation period upon publication in the periodic bulletin.
- __DEIS The applicant simultaneously transmits to both the OEQC and the approving agency, a hard copy of the DEIS, a completed OEQC publication form, a distribution list, along with an electronic word processing summary and PDF copy of the DEIS (you may send both the summary and PDF to oeqc@doh.hawaii.gov); a 45-day comment period ensues upon publication in the periodic bulletin.
- __√_FEIS The applicant simultaneously transmits to both the OEQC and the approving agency, a hard copy of the FEIS, a completed OEQC publication form, a distribution list, along with an electronic word processing summary and PDF copy of the FEIS (you may send both the summary and PDF to oeqc@doh.hawaii.gov); no comment period ensues upon publication in the periodic bulletin.
- __ Section 11-200-23 Determination The approving agency simultaneous transmits its determination of acceptance or nonacceptance (pursuant to Section 11-200-23, HAR) of the FEIS to both OEQC and the applicant. No comment period ensues upon publication in the periodic bulletin.
- __ Statutory hammer

Acceptance

The approving agency simultaneously transmits its notice to both the applicant and the OEQC that it failed to timely make a determination on the acceptance or nonacceptance of the applicant's FEIS under Section 343-5(c), HRS, and that the applicant's FEIS is deemed accepted as a matter of law.

___Section 11-200-27
Determination

The approving agency simultaneously transmits its notice to both the applicant and the OEQC that it has reviewed (pursuant to Section 11-200-27, HAR) the previously accepted FEIS and determines that a supplemental EIS is not required. No EA is required and no comment period ensues upon publication in the periodic bulletin.

___Withdrawal (explain)

Summary (Provide proposed action and purpose/need in less than 200 words. Please keep the summary brief and on this one page):

The Maui Research and Technology Park (MRTP) is located in Kihei, Maui, Hawaii. The Park is situated mauka (east) of Pi'ilani Highway and is accessible from Lipoa Parkway. The MRTP encompasses approximately 411 acres owned in fee simple by various land owners.

MRTP was established in the 1980's to bring diversification to Maui's economy through investment in high technology. Today the Park has over 180,000 square feet of office space, with over 400 people working at over 20 high technology and professional services companies.

Over the next 20 years, the Park desires to strengthen its competitive position by better servicing the unique needs of the knowledge industry community. The Park will accomplish this objective by incorporating greater flexibility into its land use controls. The Park will also embrace mixed-use development by bringing housing choices and personal and professional services within walking and biking distance of work.

The park will be developed in two phases. Phase 1, through 2024, will include a mixed-use village center, knowledge-industry employment core, residential neighborhoods, schools and parks. Phase 2, through 2034, will include additional residential development and knowledge industry expansion campuses to the east and south. At build-out, in 2034, the Park will comprise knowledge industry, commercial, and civic uses totaling approximately 2 million square feet together with 1,250 single- and multi-family residences. It is estimated that 60% of the residential units will be single-family and 40% multi-family.

Consolidated Application for Community Plan Amendment and Change in Zoning

PROJECT ASSESSMENT
APPLICATION VOLUME I
(Applications for Community Plan
Amendment and Change in Zoning)

Applicant:

Maui R&T Partners, LLC
1300 North Holopono, Suite 201
Kihei, Hawaii 96753

Prepared by:

Chris Hart & Partners, Inc.
115 North Market Street
Wailuku, Hawaii 96793-1717

Accepting Authority:

County of Maui
Department of Planning

March 2013

MAUI RESEARCH & TECHNOLOGY PARK MASTER PLAN UPDATE



**CONSOLIDATED APPLICATION FOR A
COMMUNITY PLAN AMENDMENT AND
CHANGE IN ZONING**

FOR

**MAUI RESEARCH & TECHNOLOGY PARK
MASTER PLAN UPDATE**

**PROJECT ASSESSMENT APPLICATION VOLUME I
(COMMUNITY PLAN AMENDMENT AND CHANGE IN ZONING APPLICATIONS)**

Applicant:

Maui R&T Partners, LLC.
1300 North Holopono, Suite 201
Kihei, Hawaii 96753

Consultant:

Chris Hart & Partners, Inc.
115 North Market Street
Wailuku, Hawaii, 96793-1717

Accepting Authority:

Land Use Commission
Department of Business, Economic Development & Tourism
State of Hawaii

March 2013

Consolidated Application for a
Community Plan Amendment and Change in Zoning

**Maui Research and Technology Park
Master Plan Update**

INDEX

Chapter 1 COMMUNITY PLAN AMENDMENT FORMS

- a) *Application Form*
- b) *Zoning and Flood Confirmation Form*
- c) *Required Submittals Checklist*
- d) *Assessment Requirements Checklist*
- e) *Notice of Application and Location Map*
- f) *Notarized Affidavit of Mailing of Notice of Application*
- g) *Notice of Public Hearing and Location Map*
- h) *Long Range Division – Project Data Summary Sheet*
- i) *Mylar Map and Metes & Bounds Description*

Chapter 2 CHANGE IN ZONING FORMS

- a) *Application Form*
- b) *Zoning and Flood Confirmation Form*
- c) *General Submittal Requirements*
- d) *Notice of Filing of Application and Location Map*
- e) *Notarized Affidavit of Mailing of Notice of Application*
- f) *Notice of Public Hearing and Location Map*
- g) *Notarized Affidavit of Mailing of Notice of Public Hearing*
- h) *Mylar Map and Metes & Bounds Description*

Chapter 3 LAND OWNERSHIP DOCUMENTATION

Chapter 4 LETTER OF AUTHORIZATION

**Chapter 5 OWNERS AND LESSEES OF PARCELS WITHIN 500 FEET OF
THE SUBJECT PROPERTY**

Chapter 1
*COMMUNITY PLAN
AMENDMENT
FORMS*

Chapter 1(a)
Application Form

Community Plan Amendment (CPA)

APPLICATION FORM

APPLICANT INFORMATION

Name(s): Maui R&T Partners, LLC. (Mr. Michael Rosenfeld)

Mailing Address: 1999 Avenue of the Stars, Suite 2850

City: Los Angeles State: CA Zip: 90067

Phone Number: (bus) 310-824-2200 (hm) (fax) (cell)

Signature: Michael Rosenfeld, Its Manager Email: michael@woodridgecapital.com

Agent Name: Chris Hart and Partners, Inc. (Mr. Michael Summers)

Mailing Address: 115 N. Market St.

City: Wailuku State: HI Zip: 96793

Phone Number: (bus) 242-1955 (hm) (fax) 242-1956 (cell)

Signature: Michael J. Summers Email: msummers@chpmaui.com

OWNER INFORMATION

Name(s): Maui R&T Partners, LLC. (Mr. Michael Rosenfeld)

Mailing Address: 1999 Avenue of the Stars, Suite 2850

City: Los Angeles State: CA Zip: 90067

Phone Number: (bus) 310-824-2200 (hm) (fax) (cell)

Signature: Michael Rosenfeld, Its Manager Email: michael@woodridgecapital.com

PROPERTY INFORMATION

Tax Map Key No: (2) See attached list Total Area: 282.166 acres sq.ft./acreage

Location: Access is provided via Lipoa Parkway mauka of Piilani Highway in Kihei
(Street Address, City, and/or Description)

PROPOSED ACTION

Written description of the proposed action shall include, but not be limited to: use, length, width, height, depth, building material(s), and statement of objectives of the proposed action. Attach additional sheets, if needed:

Describe Existing Use: Maui Research and Technology Park

Describe Proposed Use: Expansion of the existing MRTP with residential, commercial and knowledge based industries pursuant to an update of the Master Plan as described in this report.

Project Name: Maui Research and Technology Park Master Plan Update Valuation*: 1.39 Billion dollars

* Total cost or fair market value of proposed development associated with the application as estimated by an architect, engineer, or contractor licensed by the Department of Commerce and Consumer Affairs, State of Hawaii; or, by the administrator of Department of Public Works, Development Services Administration.

LAND USE DESIGNATIONS

| State Land Use | Existing | Proposed |
|--------------------|-------------------|--|
| District Boundary: | See attached list | Urban |
| Community Plan: | See attached list | Maui Research and Technology Park District |
| County Zoning: | See attached list | Maui Research and Technology Park District |
| Other (i.e., SMA): | | |

Parcels subject to CPA Owned by Maui R&T Partners, LLC. and others

| <u>Parcel Type</u> | <u>TMK</u> | <u>Acreage</u> | <u>STATE</u> | <u>EXISTING ZONING</u> | <u>EXISTING COMMUNITY PLAN</u> | <u>PROPOSED COMMUNITY PLAN</u> |
|--------------------|-------------------|----------------|--------------|---|--------------------------------|--|
| LOT | (2)2-2-24:02 | 5.145 | Urban | Kihei Research & Technology Park District | Project District 6 | Maui Research & Technology Park District |
| LOT | (2)2-2-24:03 | 2.781 | Urban | Kihei Research & Technology Park District | Project District 6 | Maui Research & Technology Park District |
| LOT | (2)2-2-24:04 | 2.676 | Urban | Kihei Research & Technology Park District | Project District 6 | Maui Research & Technology Park District |
| LOT | (2)2-2-24:05 | 2.435 | Urban | Kihei Research & Technology Park District | Project District 6 | Maui Research & Technology Park District |
| LOT | (2)2-2-24:06 | 2.743 | Urban | Kihei Research & Technology Park District | Project District 6 | Maui Research & Technology Park District |
| LOT | (2)2-2-24:07 | 2.815 | Urban | Kihei Research & Technology Park District | Project District 6 | Maui Research & Technology Park District |
| LOT | (2)2-2-24:08 | 2.342 | Urban | Kihei Research & Technology Park District | Project District 6 | Maui Research & Technology Park District |
| ROADWAY | (2)2-2-24:09 | 5.563 | Urban | Kihei Research & Technology Park District | Project District 6 | Maui Research & Technology Park District |
| ROADWAY | (2)2-2-24:09 por. | 0.456 | Urban | Kihei Research & Technology Park District | Project District 6 | Maui Research & Technology Park District |
| ROADWAY | (2)2-2-24:09 por. | 0.473 | Urban | Kihei Research & Technology Park District | Project District 6 | Maui Research & Technology Park District |
| ROADWAY | (2)2-2-24:09 por. | 0.449 | Urban | Kihei Research & Technology Park District | Project District 6 | Maui Research & Technology Park District |
| LOT | (2)2-2-24:14 | 58.288 | Urban | Kihei Research & Technology Park District | Project District 6 | Maui Research & Technology Park District |
| LOT | (2)2-2-24:15 | 26.694 | Urban | Kihei Research & Technology Park District | Project District 6 | Maui Research & Technology Park District |
| LOT | (2)2-2-24:16 | 90.189 | AG | AG | Project District 6 | Maui Research & Technology Park District |
| LOT | (2)2-2-24:17 | 39.018 | AG | AG | PQP | Maui Research & Technology Park District |
| ROADWAY | (2)2-2-24:18 | 7.855 | Urban | AG | AG | Maui Research & Technology Park District |
| DRAINAGEWAY | (2) 2-2-24:32 | 0.167 | Urban | Kihei Research & Technology Park District | Project District 6 | Maui Research & Technology Park District |
| LOT | (2)2-2-24:34 | 2.8 | Urban | Kihei Research & Technology Park District | Project District 6 | Maui Research & Technology Park District |
| BASIN | (2) 2-2-24:36 | 5.791 | Urban | Kihei Research & Technology Park District | Project District 6 | Maui Research & Technology Park District |
| LOT | (2) 2-2-24:37 | 2.338 | Urban | Kihei Research & Technology Park District | Project District 6 | Maui Research & Technology Park District |
| LOT | (2)2-2-24:38 | 2.304 | Urban | Kihei Research & Technology Park District | Project District 6 | Maui Research & Technology Park District |
| LOT | (2)2-2-24:39 | 2.297 | Urban | Kihei Research & Technology Park District | Project District 6 | Maui Research & Technology Park District |
| LOT | (2)2-2-24:40 | 2.293 | Urban | Kihei Research & Technology Park District | Project District 6 | Maui Research & Technology Park District |
| LOT | (2)2-2-24:41 | 3.027 | Urban | Kihei Research & Technology Park District | Project District 6 | Maui Research & Technology Park District |
| LOT | (2)2-2-24:42 | 2.900 | Urban | Kihei Research & Technology Park District | Project District 6 | Maui Research & Technology Park District |
| LOT | (2)2-2-24:43 | 2.041 | Urban | Kihei Research & Technology Park District | Project District 6 | Maui Research & Technology Park District |
| LOT | (2)2-2-24:44 | 2.101 | Urban | Kihei Research & Technology Park District | Project District 6 | Maui Research & Technology Park District |
| ROADWAY | (2)2-2-24:45 | 1.772 | Urban | Kihei Research & Technology Park District | Project District 6 | Maui Research & Technology Park District |
| ROADWAY | (2)2-2-24:45 por. | 0.479 | Urban | Kihei Research & Technology Park District | Project District 6 | Maui Research & Technology Park District |
| ROADWAY | (2)2-2-24:45 por. | 1.204 | Urban | Kihei Research & Technology Park District | Project District 6 | Maui Research & Technology Park District |
| ROADWAY | (2)2-2-24:46 | 0.730 | Urban | Kihei Research & Technology Park District | Project District 6 | Maui Research & Technology Park District |

282.166

Community Plan Amendment (CPA)

APPLICATION FORM

APPLICANT INFORMATION

Name(s): Maui R&T Partners, LLC. (Mr. Michael Rosenfeld)

Mailing Address: 1999 Avenue of the Stars, Suite 2850

City: Los Angeles State: CA Zip: 90067

Phone Number: (bus) 810-824-2200 (hm) _____ (fax) _____ (cell) _____

Signature: _____ Email: michael@woodridgecapital.com

Agent Name: Chris Hart and Partners, Inc. (Mr. Michael Summers)

Mailing Address: 115 N. Market St.

City: Wailuku State: HI Zip: 96793

Phone Number: (bus) 808-242-1955 (hm) _____ (fax) 808-242-1956 (cell) _____

Signature: Michael J. Summers Email: msummers@chpmaui.com

OWNER INFORMATION

Name(s): Haleakala Ranch

Mailing Address: 529 Kealaloa Avenue

City: Makawao State: HI Zip: 96768

Phone Number: (bus) 808-572-1500 (hm) _____ (fax) 808-572-7288 (cell) _____

Signature: Scott Email: scott@haleakalaranch.com

PROPERTY INFORMATION

Tax Map Key No: (2) 2-2-002:54 portion Total Area: 123.843 acres sq.ft./acreage

Location: Access is provided via Lipoa Parkway mauka of Piilani Highway in Kihei
(Street Address, City, and/or Description)

PROPOSED ACTION

Written description of the proposed action shall include, but not be limited to: use, length, width, height, depth, building material(s), and statement of objectives of the proposed action. Attach additional sheets, if needed:

Describe Existing Use: Maui Research and Technology Park

Describe Proposed Use: Expansion of the existing MRTP with residential, commercial and knowledge based industries pursuant to an update of the Master Plan as described in this report.

Project Name: Maui Research and Technology Park Master Plan Update Valuation*: 1.39 Billion Dollars

* Total cost or fair market value of proposed development associated with the application as estimated by an architect, engineer, or contractor licensed by the Department of Commerce and Consumer Affairs, State of Hawaii; or, by the administrator of Department of Public Works, Development Services Administration.

LAND USE DESIGNATIONS

| State Land Use | Existing | Proposed |
|--|---------------------------|---|
| District Boundary: <u>310-824-2200</u> | <u>Agricultural</u> | <u>Urban</u> |
| Community Plan: | <u>Project District 6</u> | <u>Maui Research and Technology Park District</u> |
| County Zoning: | <u>Agricultural</u> | <u>Maui Research and Technology Park District</u> |
| Other (i.e., SMA): | _____ | _____ |

Parcels subject to CPA Owned by Haleakala Ranch

| <u>TMK</u> | <u>Acreage</u> | <u>STATE</u> | <u>EXISTING ZONING</u> | <u>EXISTING COMMUNITY PLAN</u> | <u>PROPOSED COMMUNITY PLAN</u> |
|---------------------|----------------|--------------|------------------------|--------------------------------|---|
| (2)2-2-02: 54 (por) | 123.843 | AG | AG | Project District 6 | Kihei Research & Technology Park District |

Chapter 1(b)
*Zoning and Flood
Confirmation Form*

DEC 15 2011

RECEIVED

COUNTY OF MAUI
DEPARTMENT OF PLANNING
Kalana Pakui Building
250 South High Street
Wailuku, Hawaii 96793



Zoning Administration and
Enforcement Division (ZAED)
Telephone: (808) 270-7253
Facsimile: (808) 270-7634
E-mail: planning@mauicounty.gov

ZONING AND FLOOD CONFIRMATION FORM

(This section to be completed by the Applicant)

APPLICANT NAME Maui R&T Partners, LLC. (Brett Davis, Planner) TELEPHONE 808-270-1561

PROJECT NAME Maui Research and Technology Park E-MAIL bdavis@chpmaui.com

PROPERTY ADDRESS Lipoa Parkway mauka of Piilani Highway, Kihei, Maui, HI TAX MAP KEY (2) 2-2-024:002

Yes No Will this Zoning & Flood Confirmation Form be used with a Subdivision Application?
If "Yes", answer questions A and B below:

A) Will it be processed under one of the consistency exemptions of Section 18.04.030(B), MCC? Yes No
If "Yes", which exemption? _____

B) Provide the purpose of subdivision and the proposed land uses below:

- NOTE: 1) Use a separate Zoning & Flood Confirmation Form for each Tax Map Key (TMK) number.
2) If this will be used with a subdivision application AND if the zoning information for the subject property contains multiple State Land Use Districts, Community Plan Designations, or County Zoning, a signed and dated Land Use Designations (LUD) Map, prepared by a licensed surveyor showing all the various districts, designations, zonings, and any subdistricts, shall be submitted for review and approval.
3) If this will be used with a subdivision application AND if there are multiple State Land Use District designations, the applicant shall procure a District Boundary Interpretation from the State Land Use Commission.

(This section to be completed by ZAED)

LAND USE DESIGNATIONS (LUD) AND OTHER ZONING INFORMATION:

STATE LAND USE DISTRICT(S) Urban

COMMUNITY PLAN DESIGNATION(S) PD-6 Project District to R&T Park

COUNTY ZONING(S) R&T Kihei - Kihei Research & Technology Park

OTHER DESIGNATION(S)/COMMENTS

Yes No
See Additional Comments On Page Two

Yes No
See The Attached Land Use Designation Map

Yes No
(SMA) SPECIAL
MANAGEMENT
AREA

Yes No
(PH) PLANNED
DEVELOPMENT

Yes No
(PD) PROJECT
DISTRICT

FLOOD INFORMATION:

FLOOD HAZARD AREA ZONE(S) X For Flood Zone AO, FLOOD DEPTH _____

BASE FLOOD ELEVATION(S) N/A feet mean sea level, Local Tidal Datum.

*FLOODWAY Yes No *FLOOD DEVELOPMENT PERMIT REQUIRED Yes No

* For flood hazard area zones X or XS, a flood development permit would be required if any work is done in any drainage facility or stream area that would reduce the capacity of the drainage facility, river, or stream, or adversely affect downstream property.

* For subdivisions in ALL FLOOD HAZARD AREA ZONES (including zones X or XS) that involve streams, gulches, low areas, or any type of drainageway, a designation of the 100 year flood inundation limits or a drainage reserve may be required.

SUBDIVISION CONSISTENCY: N/A (Not Applicable)

**The Land Use Designations (LUD) align and a unilateral agreement is not required.

**The LUD's do not align and the available or proposed land uses appear to be:

Consistent, with a Department of Public Works / Planning unilateral agreement.

Not Consistent. Comments: _____

(Signature)
Except as permitted in Section 18.04.030(B) MCC, property containing Interim Zoning shall NOT be subdivided.

** All proposed subdivisions will be further reviewed during the subdivision application process to verify consistency, unilateral agreement requirements, and the conditions associated with a unilateral agreement [Section 18.04.030(D), Maui County Code].

REVIEWED & CONFIRMED BY:

[Signature]
(Signature)

12/16/11
(Date)

For: AARON SHINMOTO, Planning Program Administrator, Zoning Administration and Enforcement Division

DEC 15 2011

RECEIVED

COUNTY OF MAUI
DEPARTMENT OF PLANNING
Kalana Pakui Building
250 South High Street
Wailuku, Hawaii 96793



Zoning Administration and
Enforcement Division (ZAED)
Telephone: (808) 270-7253
Facsimile: (808) 270-7634
E-mail: planning@mauicounty.gov

ZONING AND FLOOD CONFIRMATION FORM

(This section to be completed by the Applicant)

APPLICANT NAME Maui R&T Partners, LLC. (Brett Davis, Planner) TELEPHONE 808-270-1561
PROJECT NAME Maui Research and Technology Park E-MAIL bdavis@chpmaui.com
PROPERTY ADDRESS Lipoa Parkway mauka of Pilihi Highway, Kihei, Maui, HI TAX MAP KEY (2) 2-2-024:003

Yes No Will this Zoning & Flood Confirmation Form be used with a Subdivision Application?
If "Yes", answer questions A and B below:

A) Will it be processed under one of the consistency exemptions of Section 18.04.030(B), MCC? Yes No
If "Yes", which exemption? _____

B) Provide the purpose of subdivision and the proposed land uses below: _____

- NOTE: 1) Use a separate Zoning & Flood Confirmation Form for each Tax Map Key (TMK) number.
2) If this will be used with a subdivision application AND if the zoning information for the subject property contains multiple State Land Use Districts, Community Plan Designations, or County Zoning, a signed and dated Land Use Designations (LUD) Map, prepared by a licensed surveyor showing all the various districts, designations, zonings, and any subdistricts, shall be submitted for review and approval.
3) If this will be used with a subdivision application AND if there are multiple State Land Use District designations, the applicant shall procure a District Boundary Interpretation from the State Land Use Commission.

(This section to be completed by ZAED)

LAND USE DESIGNATIONS (LUD) AND OTHER ZONING INFORMATION:
STATE LAND USE DISTRICT(S) Urban
COMMUNITY PLAN DESIGNATION(S) PDC - Project District 6 R&T Park
COUNTY ZONING(S) R&T Kihei - Kihei Research Technology Park
OTHER DESIGNATION(S)/COMMENTS _____

Yes No
(SMA) SPECIAL MANAGEMENT AREA

Yes No
(PH) PLANNED DEVELOPMENT

Yes No
(PD) PROJECT DISTRICT

Yes No See Additional Comments On Page Two

Yes No See The Attached Land Use Designation Map

FLOOD INFORMATION:
FLOOD HAZARD AREA ZONE(S) X For Flood Zone AO, FLOOD DEPTH _____
BASE FLOOD ELEVATION(S) N/A feet mean sea level, Local Tidal Datum.
*FLOODWAY Yes No *FLOOD DEVELOPMENT PERMIT REQUIRED Yes No

* For flood hazard area zones X or XS, a flood development permit would be required if any work is done in any drainage facility or stream area that would reduce the capacity of the drainage facility, river, or stream, or adversely affect downstream property.
* For subdivisions in ALL FLOOD HAZARD AREA ZONES (including zones X or XS) that involve streams, gulches, low areas, or any type of drainage, a designation of the 100 year flood inundation limits or a drainage reserve may be required.

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 **The LUD's do not align and the available or proposed land uses appear to be:
 Consistent, with a Department of Public Works / Planning unilateral agreement.
 Not Consistent. Comments: _____

(Signature)
Except as permitted in Section 18.04.030(B) MCC, property containing Interim Zoning shall NOT be subdivided.

** All proposed subdivisions will be further reviewed during the subdivision application process to verify consistency, unilateral agreement requirements, and the conditions associated with a unilateral agreement [Section 18.04.030(D), Maui County Code].

REVIEWED & CONFIRMED BY: *Aaron Shinmoto* 12/10/11
(Signature) (Date)

For: AARON SHINMOTO, Planning Program Administrator, Zoning Administration and Enforcement Division

DEC 15 2011

RECEIVED

COUNTY OF MAUI
DEPARTMENT OF PLANNING
Kalana Pakui Building
250 South High Street
Wailuku, Hawaii 96793



Zoning Administration and
Enforcement Division (ZAED)
Telephone: (808) 270-7253
Facsimile: (808) 270-7634
E-mail: planning@mauicounty.gov

ZONING AND FLOOD CONFIRMATION FORM

(This section to be completed by the Applicant)

APPLICANT NAME Maui R&T Partners, LLC. (Brett Davis, Planner) TELEPHONE 808-270-1561

PROJECT NAME Maui Research and Technology Park E-MAIL bdavis@chpmaui.com

PROPERTY ADDRESS Lipoa Parkway mauka of Pillani Highway, Kihel, Maui, HI TAX MAP KEY (2) 2-2-024:004

Yes No Will this Zoning & Flood Confirmation Form be used with a Subdivision Application?
If "Yes", answer questions A and B below:

A) Will it be processed under one of the consistency exemptions of Section 18.04.030(B), MCC? Yes No

If "Yes", which exemption? _____

B) Provide the purpose of subdivision and the proposed land uses below: _____

- NOTE: 1) Use a separate Zoning & Flood Confirmation Form for each Tax Map Key (TMK) number.
 2) If this will be used with a subdivision application AND if the zoning information for the subject property contains multiple State Land Use Districts, Community Plan Designations, or County Zoning, a signed and dated Land Use Designations (LUD) Map, prepared by a licensed surveyor showing all the various districts, designations, zonings, and any subdistricts, shall be submitted for review and approval.
 3) If this will be used with a subdivision application AND if there are multiple State Land Use District designations, the applicant shall procure a District Boundary Interpretation from the State Land Use Commission.

(This section to be completed by ZAED)

LAND USE DESIGNATIONS (LUD) AND OTHER ZONING INFORMATION:

STATE LAND USE DISTRICT(S) Urban

COMMUNITY PLAN DESIGNATION(S) PD6 - Project District 6 R&T Park

COUNTY ZONING(S) R&T Kihel - Kihel Research & Technology Park

OTHER DESIGNATION(S)/COMMENTS _____

Yes No
See Additional Comments On Page Two

Yes No
See The Attached Land Use Designation Map

Yes No
(SMA) SPECIAL
MANAGEMENT
AREA

Yes No
(PH) PLANNED
DEVELOPMENT

Yes No
(PD) PROJECT
DISTRICT

FLOOD INFORMATION:

FLOOD HAZARD AREA ZONE(S) X For Flood Zone AO, FLOOD DEPTH _____

BASE FLOOD ELEVATION(S) N/A feet mean sea level, Local Tidal Datum.

*FLOODWAY Yes No *FLOOD DEVELOPMENT PERMIT REQUIRED Yes No

* For flood hazard area zones X or XS, a flood development permit would be required if any work is done in any drainage facility or stream area that would reduce the capacity of the drainage facility, river, or stream, or adversely affect downstream property.

* For subdivisions in ALL FLOOD HAZARD AREA ZONES (including zones X or XS) that involve streams, gulches, low areas, or any type of drainage, a designation of the 100 year flood inundation limits or a drainage reserve may be required.

SUBDIVISION CONSISTENCY: N/A (Not Applicable)

** The Land Use Designations (LUD) align and a unilateral agreement is not required.

** The LUD's do not align and the available or proposed land uses appear to be:

Consistent, with a Department of Public Works / Planning unilateral agreement.

Not Consistent. Comments: _____

(Signature)
Except as permitted in Section 18.04.030(B) MCC, property containing Interim Zoning shall NOT be subdivided.

** All proposed subdivisions will be further reviewed during the subdivision application process to verify consistency, unilateral agreement requirements, and the conditions associated with a unilateral agreement [Section 18.04.030(D), Maui County Code].

REVIEWED & CONFIRMED BY:

Aaron Shinmoto

12/16/11

For: AARON SHINMOTO, Planning Program Administrator, Zoning Administration and Enforcement Division

DEC 15 2011

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COUNTY OF MAUI
DEPARTMENT OF PLANNING
Kalana Pakui Building
250 South High Street
Wailuku, Hawaii 96793



Zoning Administration and
Enforcement Division (ZAED)
Telephone: (808) 270-7253
Facsimile: (808) 270-7634
E-mail: planning@mauicounty.gov

ZONING AND FLOOD CONFIRMATION FORM

(This section to be completed by the Applicant)

APPLICANT NAME Maui R&T Partners, LLC. (Brett Davis, Planner) TELEPHONE 808-270-1561
PROJECT NAME Maui Research and Technology Park E-MAIL bdavis@chpmaui.com
PROPERTY ADDRESS Lipoa Parkway mauka of Piilani Highway, Kihel, Maui, HI TAX MAP KEY (2) 2-2-024:005

Yes No Will this Zoning & Flood Confirmation Form be used with a Subdivision Application?
If "Yes", answer questions A and B below:

A) Will it be processed under one of the consistency exemptions of Section 18.04.030(B), MCC? Yes No
If "Yes", which exemption? _____

B) Provide the purpose of subdivision and the proposed land uses below:

- NOTE: 1) Use a separate Zoning & Flood Confirmation Form for each Tax Map Key (TMK) number.
2) If this will be used with a subdivision application AND if the zoning information for the subject property contains multiple State Land Use Districts, Community Plan Designations, or County Zoning, a signed and dated Land Use Designations (LUD) Map, prepared by a licensed surveyor showing all the various districts, designations, zonings, and any subdistricts, shall be submitted for review and approval.
3) If this will be used with a subdivision application AND if there are multiple State Land Use District designations, the applicant shall procure a District Boundary Interpretation from the State Land Use Commission.

(This section to be completed by ZAED)

LAND USE DESIGNATIONS (LUD) AND OTHER ZONING INFORMATION:

STATE LAND USE DISTRICT(S) Urban
COMMUNITY PLAN DESIGNATION(S) PD-6 Project District 6 R&T Park
COUNTY ZONING(S) R&T Kihel - Kihel Research & Technology park
OTHER DESIGNATION(S)/COMMENTS _____

Yes No
See Additional Comments On Page Two

Yes No
See The Attached Land Use Designation Map

Yes No
(SMA) SPECIAL MANAGEMENT AREA

Yes No
(PH) PLANNED DEVELOPMENT

Yes No
(PD) PROJECT DISTRICT

FLOOD INFORMATION:

FLOOD HAZARD AREA ZONE(S) X For Flood Zone AO, FLOOD DEPTH _____
BASE FLOOD ELEVATION(S) N/A feet mean sea level, Local Tidal Datum.

*FLOODWAY Yes No *FLOOD DEVELOPMENT PERMIT REQUIRED Yes No
* For flood hazard area zones X or XS, a flood development permit would be required if any work is done in any drainage facility or stream area that would reduce the capacity of the drainage facility, river, or stream, or adversely affect downstream property.
* For subdivisions in ALL FLOOD HAZARD AREA ZONES (including zones X or XS) that involve streams, gulches, low areas, or any type of drainage, a designation of the 100 year flood inundation limits or a drainage reserve may be required.

SUBDIVISION CONSISTENCY: N/A (Not Applicable)
 **The Land Use Designations (LUD) align and a unilateral agreement is not required.
 **The LUD's do not align and the available or proposed land uses appear to be:
 Consistent, with a Department of Public Works / Planning unilateral agreement.
 Not Consistent. Comments: _____

(Signature)
Except as permitted in Section 18.04.030(B) MCC, property containing Interim Zoning shall NOT be subdivided.

** All proposed subdivisions will be further reviewed during the subdivision application process to verify consistency, unilateral agreement requirements, and the conditions associated with a unilateral agreement [Section 18.04.030(D), Maui County Code].

REVIEWED & CONFIRMED BY: *Aaron Shinmoto* 12/16/11
(Signature) (Date)
For: AARON SHINMOTO, Planning Program Administrator, Zoning Administration and Enforcement Division

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ZONING AND FLOOD CONFIRMATION FORM

(This section to be completed by the Applicant)

APPLICANT NAME Maui R&T Partners, LLC. (Brett Davis, Planner) TELEPHONE 808-270-1561

PROJECT NAME Maui Research and Technology Park E-MAIL bdavis@chpmaui.com

PROPERTY ADDRESS Lipoa Parkway mauka of Pillani Highway, Kihei, Maui, HI TAX MAP KEY (2) 2-2-024:006

Yes No Will this Zoning & Flood Confirmation Form be used with a Subdivision Application?
If "Yes", answer questions A and B below:

A) Will it be processed under one of the consistency exemptions of Section 18.04.030(B), MCC? Yes No
If "Yes", which exemption? _____

B) Provide the purpose of subdivision and the proposed land uses below: _____

- NOTE: 1) Use a separate Zoning & Flood Confirmation Form for each Tax Map Key (TMK) number.
2) If this will be used with a subdivision application AND if the zoning information for the subject property contains multiple State Land Use Districts, Community Plan Designations, or County Zoning, a signed and dated Land Use Designations (LUD) Map, prepared by a licensed surveyor showing all the various districts, designations, zonings, and any subdistricts, shall be submitted for review and approval.
3) If this will be used with a subdivision application AND if there are multiple State Land Use District designations, the applicant shall procure a District Boundary Interpretation from the State Land Use Commission.

(This section to be completed by ZAED)

LAND USE DESIGNATIONS (LUD) AND OTHER ZONING INFORMATION:

STATE LAND USE DISTRICT(S) urban

COMMUNITY PLAN DESIGNATION(S) PD-6 Project District 6 R&T Park

COUNTY ZONING(S) Kihei R&T - Kihei Research & Technology Park

OTHER DESIGNATION(S)/COMMENTS

Yes No
See Additional Comments On Page Two

Yes No
See The Attached Land Use Designation Map

Yes No
(SMA) SPECIAL MANAGEMENT AREA

Yes No
(PH) PLANNED DEVELOPMENT

Yes No
(PD) PROJECT DISTRICT

FLOOD INFORMATION:

FLOOD HAZARD AREA ZONE(S) X For Flood Zone AO, FLOOD DEPTH _____

BASE FLOOD ELEVATION(S) N/A feet mean sea level, Local Tidal Datum.

*FLOODWAY Yes No *FLOOD DEVELOPMENT PERMIT REQUIRED Yes No

* For flood hazard area zones X or XS, a flood development permit would be required if any work is done in any drainage facility or stream area that would reduce the capacity of the drainage facility, river, or stream, or adversely affect downstream property.

* For subdivisions in ALL FLOOD HAZARD AREA ZONES (including zones X or XS) that involve streams, gulches, low areas, or any type of drainageway, a designation of the 100 year flood inundation limits or a drainage reserve may be required.

SUBDIVISION CONSISTENCY:

N/A (Not Applicable)

**The Land Use Designations (LUD) align and a unilateral agreement is not required.

**The LUD's do not align and the available or proposed land uses appear to be:

Consistent, with a Department of Public Works / Planning unilateral agreement.

Not Consistent. Comments: _____

(Signature)
Except as permitted in Section 18.04.030(B) MCC, property containing Interim Zoning shall NOT be subdivided.

** All proposed subdivisions will be further reviewed during the subdivision application process to verify consistency, unilateral agreement requirements, and the conditions associated with a unilateral agreement [Section 18.04.030(D), Maui County Code].

REVIEWED & CONFIRMED BY:

[Signature]

12/16/11

(Signature)

(Date)

For: AARON SHINMOTO, Planning Program Administrator, Zoning Administration and Enforcement Division

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ZONING AND FLOOD CONFIRMATION FORM

(This section to be completed by the Applicant)

APPLICANT NAME Maui R&T Partners, LLC. (Brett Davis, Planner) TELEPHONE 808-270-1561
PROJECT NAME Maui Research and Technology Park E-MAIL bdavis@chpmaui.com
PROPERTY ADDRESS Lipoa Parkway mauka of Pillani Highway, Kihei, Maui, HI TAX MAP KEY (2) 2-2-024:007

Yes No Will this Zoning & Flood Confirmation Form be used with a Subdivision Application?
If "Yes", answer questions A and B below:
A) Will it be processed under one of the consistency exemptions of Section 18.04.030(B), MCC? Yes No
If "Yes", which exemption? _____
B) Provide the purpose of subdivision and the proposed land uses below: _____

- NOTE: 1) Use a separate Zoning & Flood Confirmation Form for each Tax Map Key (TMK) number.
 2) If this will be used with a subdivision application AND if the zoning information for the subject property contains multiple State Land Use Districts, Community Plan Designations, or County Zoning, a signed and dated Land Use Designations (LUD) Map, prepared by a licensed surveyor showing all the various districts, designations, zonings, and any subdistricts, shall be submitted for review and approval.
 3) If this will be used with a subdivision application AND if there are multiple State Land Use District designations, the applicant shall procure a District Boundary Interpretation from the State Land Use Commission.

(This section to be completed by ZAED)

LAND USE DESIGNATIONS (LUD) AND OTHER ZONING INFORMATION:

STATE LAND USE DISTRICT(S) Urban
COMMUNITY PLAN DESIGNATION(S) PD 6 Project District 6 R&T Park
COUNTY ZONING(S) RAT Kihei - Kihei Research & Technology Park
OTHER DESIGNATION(S)/COMMENTS _____

Yes No
(SMA) SPECIAL MANAGEMENT AREA

Yes No
(PH) PLANNED DEVELOPMENT

Yes No
(PD) PROJECT DISTRICT

Yes No See Additional Comments On Page Two

Yes No See The Attached Land Use Designation Map

FLOOD INFORMATION:

FLOOD HAZARD AREA ZONE(S) X For Flood Zone AO, FLOOD DEPTH _____
BASE FLOOD ELEVATION(S) N/A feet mean sea level, Local Tidal Datum.
*FLOODWAY Yes No *FLOOD DEVELOPMENT PERMIT REQUIRED Yes No

* For flood hazard area zones X or XS, a flood development permit would be required if any work is done in any drainage facility or stream area that would reduce the capacity of the drainage facility, river, or stream, or adversely affect downstream property.
* For subdivisions in ALL FLOOD HAZARD AREA ZONES (including zones X or XS) that involve streams, gulches, low areas, or any type of draingeway, a designation of the 100 year flood inundation limits or a drainage reserve may be required.

SUBDIVISION CONSISTENCY: N/A (Not Applicable)

**The Land Use Designations (LUD) align and a unilateral agreement is not required.
 **The LUD's do not align and the available or proposed land uses appear to be:
 Consistent, with a Department of Public Works / Planning unilateral agreement.
 Not Consistent. Comments: _____

(Signature)
Except as permitted in Section 18.04.030(B) MCC, property containing Interim Zoning shall NOT be subdivided.

** All proposed subdivisions will be further reviewed during the subdivision application process to verify consistency, unilateral agreement requirements, and the conditions associated with a unilateral agreement (Section 18.04.030(D), Maui County Code).

REVIEWED & CONFIRMED BY:

[Signature] (Signature) 12/16/11 (Date)

For: AARON SHINMOTO, Planning Program Administrator, Zoning Administration and Enforcement Division

DEC 15 2011

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Facsimile: (808) 270-7634
E-mail: planning@mauicounty.gov

ZONING AND FLOOD CONFIRMATION FORM

(This section to be completed by the Applicant)

APPLICANT NAME Maui R&T Partners, LLC. (Brett Davis, Planner) TELEPHONE 808-270-1561

PROJECT NAME Maui Research and Technology Park E-MAIL bdavis@chpmaui.com

PROPERTY ADDRESS Lipoa Parkway mauka of Piilani Highway, Kihei, Maui, HI TAX MAP KEY (2) 2-2-024:008

Yes No Will this Zoning & Flood Confirmation Form be used with a Subdivision Application?
If "Yes", answer questions A and B below:

A) Will it be processed under one of the consistency exemptions of Section 18.04.030(B), MCC? Yes No
If "Yes", which exemption? _____

B) Provide the purpose of subdivision and the proposed land uses below: _____

- NOTE: 1) Use a separate Zoning & Flood Confirmation Form for each Tax Map Key (TMK) number.
2) If this will be used with a subdivision application AND if the zoning information for the subject property contains multiple State Land Use Districts, Community Plan Designations, or County Zoning, a signed and dated Land Use Designations (LUD) Map, prepared by a licensed surveyor showing all the various districts, designations, zonings, and any subdistricts, shall be submitted for review and approval.
3) If this will be used with a subdivision application AND if there are multiple State Land Use District designations, the applicant shall procure a District Boundary Interpretation from the State Land Use Commission.

(This section to be completed by ZAED)

LAND USE DESIGNATIONS (LUD) AND OTHER ZONING INFORMATION:

STATE LAND USE DISTRICT(S) Urban

COMMUNITY PLAN DESIGNATION(S) PD-6 Project District 6 R&T Park

COUNTY ZONING(S) R&T Kihei - Kihei Research & Technology Park

OTHER DESIGNATION(S)/COMMENTS Proposed Road

Yes No
(SMA) SPECIAL MANAGEMENT AREA

Yes No
(PH) PLANNED DEVELOPMENT

Yes No
(PD) PROJECT DISTRICT

Yes No See Additional Comments On Page Two

Yes No See The Attached Land Use Designation Map

FLOOD INFORMATION:

FLOOD HAZARD AREA ZONE(S) X For Flood Zone AO, FLOOD DEPTH _____

BASE FLOOD ELEVATION(S) N/A feet mean sea level, Local Tidal Datum.

*FLOODWAY Yes No *FLOOD DEVELOPMENT PERMIT REQUIRED Yes No

* For flood hazard area zones X or XS, a flood development permit would be required if any work is done in any drainage facility or stream area that would reduce the capacity of the drainage facility, river, or stream, or adversely affect downstream property.
* For subdivisions in ALL FLOOD HAZARD AREA ZONES (including zones X or XS) that involve streams, gulches, low areas, or any type of draingeway, a designation of the 100 year flood inundation limits or a drainage reserve may be required.

SUBDIVISION CONSISTENCY:

N/A (Not Applicable)

**The Land Use Designations (LUD) align and a unilateral agreement is not required.

**The LUD's do not align and the available or proposed land uses appear to be:

Consistent, with a Department of Public Works / Planning unilateral agreement.

Not Consistent. Comments: _____

(Signature)
Except as permitted in Section 18.04.030(B) MCC, property containing Interim Zoning shall NOT be subdivided.

** All proposed subdivisions will be further reviewed during the subdivision application process to verify consistency, unilateral agreement requirements, and the conditions associated with a unilateral agreement (Section 18.04.030(D), Maui County Code).

REVIEWED & CONFIRMED BY:

Aaron Shinmoto
(Signature)

12/16/11
(Date)

For: AARON SHINMOTO, Planning Program Administrator, Zoning Administration and Enforcement Division

DEC 15 2011

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COUNTY OF MAUI
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250 South High Street
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Facsimile: (808) 270-7634
E-mail: planning@mauicounty.gov

ZONING AND FLOOD CONFIRMATION FORM

(This section to be completed by the Applicant)

APPLICANT NAME Maui R&T Partners, LLC. (Brett Davis, Planner) TELEPHONE 808-270-1561
PROJECT NAME Maui Research and Technology Park E-MAIL bdavis@chpmaui.com
PROPERTY ADDRESS Lipoa Parkway mauka of Piilani Highway, Kihei, Maui, HI TAX MAP KEY (2) 2-2-024:009

Yes No Will this Zoning & Flood Confirmation Form be used with a Subdivision Application?
If "Yes", answer questions A and B below:

A) Will it be processed under one of the consistency exemptions of Section 18.04.030(B), MCC? Yes No
If "Yes", which exemption? _____

B) Provide the purpose of subdivision and the proposed land uses below: _____

- NOTE: 1) Use a separate Zoning & Flood Confirmation Form for each Tax Map Key (TMK) number.
2) If this will be used with a subdivision application AND if the zoning information for the subject property contains multiple State Land Use Districts, Community Plan Designations, or County Zoning, a signed and dated Land Use Designations (LUD) Map, prepared by a licensed surveyor showing all the various districts, designations, zonings, and any subdistricts, shall be submitted for review and approval.
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(This section to be completed by ZAED)

LAND USE DESIGNATIONS (LUD) AND OTHER ZONING INFORMATION:

STATE LAND USE DISTRICT(S) Urban
COMMUNITY PLAN DESIGNATION(S) PD-6 Project District 6 - R&T Park
COUNTY ZONING(S) Kihei R&T - Kihei Research + Technology Park
OTHER DESIGNATION(S)/COMMENTS Proposed Street Road

Yes No
(SMA) SPECIAL MANAGEMENT AREA

Yes No
(PH) PLANNED DEVELOPMENT

Yes No
(PD) PROJECT DISTRICT

Yes No See Additional Comments On Page Two

Yes No See The Attached Land Use Designation Map

FLOOD INFORMATION:

FLOOD HAZARD AREA ZONE(S) X For Flood Zone AO, FLOOD DEPTH _____
BASE FLOOD ELEVATION(S) N/A feet mean sea level, Local Tidal Datum.

- *FLOODWAY Yes No *FLOOD DEVELOPMENT PERMIT REQUIRED Yes No
- * For flood hazard area zones X or XS, a flood development permit would be required if any work is done in any drainage facility or stream area that would reduce the capacity of the drainage facility, river, or stream, or adversely affect downstream property.
* For subdivisions in ALL FLOOD HAZARD AREA ZONES (including zones X or XS) that involve streams, gulches, low areas, or any type of drainageway, a designation of the 100 year flood inundation limits or a drainage reserve may be required.

SUBDIVISION CONSISTENCY: N/A (Not Applicable)

**The Land Use Designations (LUD) align and a unilateral agreement is not required.

**The LUD's do not align and the available or proposed land uses appear to be:
 Consistent, with a Department of Public Works / Planning unilateral agreement.
 Not Consistent, Comments: _____

(Signature)
Except as permitted in Section 18.04.030(B) MCC, property containing Interim Zoning shall NOT be subdivided.

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REVIEWED & CONFIRMED BY:

Aaron Shinmoto (Signature) 12/16/11 (Date)

For: AARON SHINMOTO, Planning Program Administrator, Zoning Administration and Enforcement Division

DEC 15 2011

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COUNTY OF MAUI
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ZONING AND FLOOD CONFIRMATION FORM

(This section to be completed by the Applicant)

APPLICANT NAME Maui R&T Partners, LLC. (Brett Davis, Planner) TELEPHONE 808-270-1561

PROJECT NAME Maui Research and Technology Park E-MAIL bdavis@chpmaui.com

PROPERTY ADDRESS Lipoa Parkway mauka of Piilani Highway, Kihel, Maui, HI TAX MAP KEY (2) 2-2-024:014

Yes No Will this Zoning & Flood Confirmation Form be used with a Subdivision Application?
If "Yes", answer questions A and B below:

A) Will it be processed under one of the consistency exemptions of Section 18.04.030(B), MCC? Yes No
If "Yes", which exemption? _____

B) Provide the purpose of subdivision and the proposed land uses below: _____

- NOTE: 1) Use a separate Zoning & Flood Confirmation Form for each Tax Map Key (TMK) number.
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3) If this will be used with a subdivision application AND if there are multiple State Land Use District designations, the applicant shall procure a District Boundary Interpretation from the State Land Use Commission.

(This section to be completed by ZAED)

LAND USE DESIGNATIONS (LUD) AND OTHER ZONING INFORMATION:

STATE LAND USE DISTRICT(S) Urban + Ag-Agricultural

COMMUNITY PLAN DESIGNATION(S) PD-6 Project District 6 - R&T Park

COUNTY ZONING(S) R&T Kihel Kihel Research & Technology Park

OTHER DESIGNATION(S)/COMMENTS Applicant needs to confirm with State LLC

Yes No
See Additional Comments On Page Two

Yes No
See The Attached Land Use Designation Map

Yes No
(SMA) SPECIAL
MANAGEMENT
AREA

Yes No
(PH) PLANNED
DEVELOPMENT

Yes No
(PD) PROJECT
DISTRICT

FLOOD INFORMATION:

FLOOD HAZARD AREA ZONE(S) X For Flood Zone AO, FLOOD DEPTH _____

BASE FLOOD ELEVATION(S) N/A feet mean sea level, Local Tidal Datum.

*FLOODWAY Yes No *FLOOD DEVELOPMENT PERMIT REQUIRED Yes No

* For flood hazard area zones X or XS, a flood development permit would be required if any work is done in any drainage facility or stream area that would reduce the capacity of the drainage facility, river, or stream, or adversely affect downstream property.

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SUBDIVISION CONSISTENCY:

N/A (Not Applicable)

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Consistent, with a Department of Public Works / Planning unilateral agreement.

Not Consistent. Comments: _____

(Signature)
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REVIEWED & CONFIRMED BY:

[Signature]

12/16/11
(Date)

For: AARON SHINMOTO, Planning Program Administrator, Zoning Administration and Enforcement Division

DEC 15 2011

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DEPARTMENT OF PLANNING
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Facsimile: (808) 270-7634
E-mail: planning@mauicounty.gov

ZONING AND FLOOD CONFIRMATION FORM

(This section to be completed by the Applicant)

APPLICANT NAME Maui R&T Partners, LLC. (Brett Davis, Planner) TELEPHONE 808-270-1561

PROJECT NAME Maui Research and Technology Park E-MAIL bdavis@chpmaui.com

PROPERTY ADDRESS Lipoa Parkway mauka of Pilihi Highway, Kihel, Maui, HI TAX MAP KEY (2) 2-2-024:015

Yes No Will this Zoning & Flood Confirmation Form be used with a Subdivision Application?

If "Yes", answer questions A and B below:

A) Will it be processed under one of the consistency exemptions of Section 18.04.030(B), MCC? Yes No

If "Yes", which exemption? _____

B) Provide the purpose of subdivision and the proposed land uses below: _____

- NOTE: 1) Use a separate Zoning & Flood Confirmation Form for each Tax Map Key (TMK) number.
 2) If this will be used with a subdivision application AND if the zoning information for the subject property contains multiple State Land Use Districts, Community Plan Designations, or County Zoning, a signed and dated Land Use Designations (LUD) Map, prepared by a licensed surveyor showing all the various districts, designations, zonings, and any subdistricts, shall be submitted for review and approval.
 3) If this will be used with a subdivision application AND if there are multiple State Land Use District designations, the applicant shall procure a District Boundary Interpretation from the State Land Use Commission.

(This section to be completed by ZAED)

LAND USE DESIGNATIONS (LUD) AND OTHER ZONING INFORMATION:

STATE LAND USE DISTRICT(S) Urban + Ag-Agricultural

COMMUNITY PLAN DESIGNATION(S) PD-6 - Project District 6 - R&T Park

COUNTY ZONING(S) R&T Kihel - Kihel Research + Technology Park

OTHER DESIGNATION(S)/COMMENTS Applicant needs to confirm with State LUD

Yes No
See Additional Comments On Page Two

Yes No
See The Attached Land Use Designation Map

Yes No
(SMA) SPECIAL
MANAGEMENT
AREA

Yes No
(PH) PLANNED
DEVELOPMENT

Yes No
(PD) PROJECT
DISTRICT

FLOOD INFORMATION:

FLOOD HAZARD AREA ZONE(S) X For Flood Zone AO, FLOOD DEPTH _____

BASE FLOOD ELEVATION(S) N/A feet mean sea level, Local Tidal Datum.

*FLOODWAY Yes No *FLOOD DEVELOPMENT PERMIT REQUIRED Yes No

* For flood hazard area zones X or XS, a flood development permit would be required if any work is done in any drainage facility or stream area that would reduce the capacity of the drainage facility, river, or stream, or adversely affect downstream property.

* For subdivisions in ALL FLOOD HAZARD AREA ZONES (including zones X or XS) that involve streams, gulches, low areas, or any type of drainageway, a designation of the 100 year flood inundation limits or a drainage reserve may be required.

SUBDIVISION CONSISTENCY: N/A (Not Applicable)

**The Land Use Designations (LUD) align and a unilateral agreement is not required.

**The LUD's do not align and the available or proposed land uses appear to be:

Consistent, with a Department of Public Works / Planning unilateral agreement.

Not Consistent. Comments: _____

(Signature)
Except as permitted in Section 18.04.030(B) MCC, property containing Interim Zoning shall NOT be subdivided.

** All proposed subdivisions will be further reviewed during the subdivision application process to verify consistency, unilateral agreement requirements, and the conditions associated with a unilateral agreement [Section 18.04.030(D), Maui County Code].

REVIEWED & CONFIRMED BY:

Aaron Shinmoto

12/16/11

For: AARON SHINMOTO, Planning Program Administrator, Zoning Administration and Enforcement Division

DEC 15 2011

RECEIVED

COUNTY OF MAUI
DEPARTMENT OF PLANNING
Kalana Pakui Building
250 South High Street
Wailuku, Hawaii 96793



Zoning Administration and
Enforcement Division (ZAED)
Telephone: (808) 270-7253
Facsimile: (808) 270-7634
E-mail: planning@mauicounty.gov

ZONING AND FLOOD CONFIRMATION FORM

(This section to be completed by the Applicant)

APPLICANT NAME Maui R&T Partners, LLC. (Brett Davis, Planner) TELEPHONE 808-270-1561
PROJECT NAME Maui Research and Technology Park E-MAIL bdavis@chpmaui.com
PROPERTY ADDRESS Lipoa Parkway mauka of Pillani Highway, Kihei, Maui, HI TAX MAP KEY (2) 2-2-024:016

Yes No Will this Zoning & Flood Confirmation Form be used with a Subdivision Application?
If "Yes", answer questions A and B below:
A) Will it be processed under one of the consistency exemptions of Section 18.04.030(B), MCC? Yes No
If "Yes", which exemption? _____
B) Provide the purpose of subdivision and the proposed land uses below: _____

- NOTE: 1) Use a separate Zoning & Flood Confirmation Form for each Tax Map Key (TMK) number.
2) If this will be used with a subdivision application AND if the zoning information for the subject property contains multiple State Land Use Districts, Community Plan Designations, or County Zoning, a signed and dated Land Use Designations (LUD) Map, prepared by a licensed surveyor showing all the various districts, designations, zonings, and any subdistricts, shall be submitted for review and approval.
3) If this will be used with a subdivision application AND if there are multiple State Land Use District designations, the applicant shall procure a District Boundary Interpretation from the State Land Use Commission.

(This section to be completed by ZAED)

LAND USE DESIGNATIONS (LUD) AND OTHER ZONING INFORMATION:

STATE LAND USE DISTRICT(S) AG1-Agricultural + Urban (per.)
COMMUNITY PLAN DESIGNATION(S) PD-6 - Project District 6 R&T Park
COUNTY ZONING(S) AG1-Agricultural
OTHER DESIGNATION(S)/COMMENTS Applicant needs to confirm with State on Land Use District Boundary

Yes No
(SMA) SPECIAL MANAGEMENT AREA
 Yes No
(PH) PLANNED DEVELOPMENT
 Yes No
(PD) PROJECT DISTRICT

Yes No
See Additional Comments On Page Two

Yes No
See The Attached Land Use Designation Map

FLOOD INFORMATION:

FLOOD HAZARD AREA ZONE(S) X For Flood Zone AO, FLOOD DEPTH _____
BASE FLOOD ELEVATION(S) N/A feet mean sea level, Local Tidal Datum.

*FLOODWAY Yes No *FLOOD DEVELOPMENT PERMIT REQUIRED Yes No
* For flood hazard area zones X or XS, a flood development permit would be required if any work is done in any drainage facility or stream area that would reduce the capacity of the drainage facility, river, or stream, or adversely affect downstream property.
* For subdivisions in ALL FLOOD HAZARD AREA ZONES (including zones X or XS) that involve streams, gulches, low areas, or any type of drainageway, a designation of the 100 year flood inundation limits or a drainage reserve may be required.

SUBDIVISION CONSISTENCY:

N/A (Not Applicable)

**The Land Use Designations (LUD) align and a unilateral agreement is not required.

**The LUD's do not align and the available or proposed land uses appear to be:

Consistent, with a Department of Public Works / Planning unilateral agreement.

Not Consistent. Comments: _____

(Signature)
Except as permitted in Section 18.04.030(B) MCC, property containing Interim Zoning shall NOT be subdivided.

** All proposed subdivisions will be further reviewed during the subdivision application process to verify consistency, unilateral agreement requirements, and the conditions associated with a unilateral agreement [Section 18.04.030(D), Maui County Code].

REVIEWED & CONFIRMED BY:

[Signature]

12/16/11

For: AARON SHINMOTO, Planning Program Administrator, Zoning Administration and Enforcement Division

DEC 15 2011

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ZONING AND FLOOD CONFIRMATION FORM

(This section to be completed by the Applicant)

APPLICANT NAME Maui R&T Partners, LLC. (Brett Davis, Planner) TELEPHONE 808-270-1561

PROJECT NAME Maui Research and Technology Park E-MAIL bdavis@chpmaui.com

PROPERTY ADDRESS Lipoa Parkway mauka of Pili Highway, Kihei, Maui, HI TAX MAP KEY (2) 2-2-024:017

Yes No Will this Zoning & Flood Confirmation Form be used with a Subdivision Application?

If "Yes", answer questions A and B below:

A) Will it be processed under one of the consistency exemptions of Section 18.04.030(B), MCC? Yes No

If "Yes", which exemption? _____

B) Provide the purpose of subdivision and the proposed land uses below: _____

- NOTE: 1) Use a separate Zoning & Flood Confirmation Form for each Tax Map Key (TMK) number.
 2) If this will be used with a subdivision application AND if the zoning information for the subject property contains multiple State Land Use Districts, Community Plan Designations, or County Zoning, a signed and dated Land Use Designations (LUD) Map, prepared by a licensed surveyor showing all the various districts, designations, zonings, and any subdistricts, shall be submitted for review and approval.
 3) If this will be used with a subdivision application AND if there are multiple State Land Use District designations, the applicant shall procure a District Boundary Interpretation from the State Land Use Commission.

(This section to be completed by ZAED)

LAND USE DESIGNATIONS (LUD) AND OTHER ZONING INFORMATION:

STATE LAND USE DISTRICT(S) Urban & Agricultural

COMMUNITY PLAN DESIGNATION(S) P/AP - Public- quasi / public (only 20 acres)

COUNTY ZONING(S) Ag - Agricultural

OTHER DESIGNATION(S)/COMMENTS Applicant needs to confirm with state and LUD designations

Yes No
See Additional Comments On Page Two

Yes No
See The Attached Land Use Designation Map

Yes No
(SMA) SPECIAL
MANAGEMENT
AREA

Yes No
(PH) PLANNED
DEVELOPMENT

Yes No
(PD) PROJECT
DISTRICT

FLOOD INFORMATION:

FLOOD HAZARD AREA ZONE(S) X For Flood Zone AO, FLOOD DEPTH _____

BASE FLOOD ELEVATION(S) N/A feet mean sea level, Local Tidal Datum.

*FLOODWAY Yes No *FLOOD DEVELOPMENT PERMIT REQUIRED Yes No

* For flood hazard area zones X or XS, a flood development permit would be required if any work is done in any drainage facility or stream area that would reduce the capacity of the drainage facility, river, or stream, or adversely affect downstream property.

* For subdivisions in ALL FLOOD HAZARD AREA ZONES (including zones X or XS) that involve streams, gulches, low areas, or any type of drainageway, a designation of the 100 year flood inundation limits or a drainage reserve may be required.

SUBDIVISION CONSISTENCY:

N/A (Not Applicable)

**The Land Use Designations (LUD) align and a unilateral agreement is not required.

**The LUD's do not align and the available or proposed land uses appear to be:

Consistent, with a Department of Public Works / Planning unilateral agreement.

Not Consistent. Comments: _____

(Signature)
Except as permitted in Section 18.04.030(B) MCC, property containing Interim Zoning shall NOT be subdivided.

** All proposed subdivisions will be further reviewed during the subdivision application process to verify consistency, unilateral agreement requirements, and the conditions associated with a unilateral agreement [Section 18.04.030(D), Maui County Code].

REVIEWED & CONFIRMED BY:

Aaron Shinmoto
(Signature)

12/16/11
(Date)

For: AARON SHINMOTO, Planning Program Administrator, Zoning Administration and Enforcement Division

DEC 15 2011

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ZONING AND FLOOD CONFIRMATION FORM

(This section to be completed by the Applicant)

APPLICANT NAME Maui R&T Partners, LLC. (Brett Davis, Planner) TELEPHONE 808-270-1561
PROJECT NAME Maui Research and Technology Park E-MAIL bdavis@chpmaui.com
PROPERTY ADDRESS Lipoa Parkway mauka of Piilani Highway, Kihei, Maui, HI TAX MAP KEY (2) 2-2-024:018

Yes No Will this Zoning & Flood Confirmation Form be used with a Subdivision Application?
If "Yes", answer questions A and B below:

A) Will it be processed under one of the consistency exemptions of Section 18.04.030(B), MCC? Yes No
If "Yes", which exemption? _____

B) Provide the purpose of subdivision and the proposed land uses below: _____

- NOTE: 1) Use a separate Zoning & Flood Confirmation Form for each Tax Map Key (TMK) number.
2) If this will be used with a subdivision application AND if the zoning information for the subject property contains multiple State Land Use Districts, Community Plan Designations, or County Zoning, a signed and dated Land Use Designations (LUD) Map, prepared by a licensed surveyor showing all the various districts, designations, zonings, and any subdistricts, shall be submitted for review and approval.
3) If this will be used with a subdivision application AND if there are multiple State Land Use District designations, the applicant shall procure a District Boundary Interpretation from the State Land Use Commission.

(This section to be completed by ZAED)

LAND USE DESIGNATIONS (LUD) AND OTHER ZONING INFORMATION:

STATE LAND USE DISTRICT(S) Urban
COMMUNITY PLAN DESIGNATION(S) Agriculture
COUNTY ZONING(S) Agriculture
OTHER DESIGNATION(S)/COMMENTS N/A

Yes No
(SMA) SPECIAL MANAGEMENT AREA

Yes No
(PH) PLANNED DEVELOPMENT

Yes No
(PD) PROJECT DISTRICT

Yes No See Additional Comments On Page Two

Yes No See The Attached Land Use Designation Map

FLOOD INFORMATION:

FLOOD HAZARD AREA ZONE(S) X For Flood Zone AO, FLOOD DEPTH N/A
BASE FLOOD ELEVATION(S) N/A feet mean sea level, Local Tidal Datum.

*FLOODWAY Yes No *FLOOD DEVELOPMENT PERMIT REQUIRED Yes No
* For flood hazard area zones X or XS, a flood development permit would be required if any work is done in any drainage facility or stream area that would reduce the capacity of the drainage facility, river, or stream, or adversely affect downstream property.
* For subdivisions in ALL FLOOD HAZARD AREA ZONES (including zones X or XS) that involve streams, gulches, low areas, or any type of drainageway, a designation of the 100 year flood inundation limits or a drainage reserve may be required.

SUBDIVISION CONSISTENCY:

N/A (Not Applicable)

**The Land Use Designations (LUD) align and a unilateral agreement is not required.

**The LUD's do not align and the available or proposed land uses appear to be:

Consistent, with a Department of Public Works / Planning unilateral agreement.

Not Consistent. Comments: _____

(Signature)
Except as permitted in Section 18.04.030(B) MCC, property containing Interim Zoning shall NOT be subdivided.

** All proposed subdivisions will be further reviewed during the subdivision application process to verify consistency, unilateral agreement requirements, and the conditions associated with a unilateral agreement [Section 18.04.030(D), Maui County Code].

REVIEWED & CONFIRMED BY:

Aaron Shinmoto
(Signature)

12/19/11
(Date)

For: AARON SHINMOTO, Planning Program Administrator, Zoning Administration and Enforcement Division

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COUNTY OF MAUI
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250 South High Street
Wailuku, Hawaii 96793



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Facsimile: (808) 270-7634
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ZONING AND FLOOD CONFIRMATION FORM

(This section to be completed by the Applicant)

APPLICANT NAME Maui R&T Partners, LLC. (Brett Davis, Planner) TELEPHONE 808-270-1561
PROJECT NAME Maui Research and Technology Park E-MAIL bdavis@chpmaui.com
PROPERTY ADDRESS Lipoa Parkway mauka of Piilani Highway, Kihei, Maui, HI TAX MAP KEY (2) 2-2-024:032

Yes No Will this Zoning & Flood Confirmation Form be used with a Subdivision Application?
If "Yes", answer questions A and B below:

A) Will it be processed under one of the consistency exemptions of Section 18.04.030(B), MCC? Yes No
If "Yes", which exemption? _____

B) Provide the purpose of subdivision and the proposed land uses below: _____

- NOTE: 1) Use a separate Zoning & Flood Confirmation Form for each Tax Map Key (TMK) number.
2) If this will be used with a subdivision application AND if the zoning information for the subject property contains multiple State Land Use Districts, Community Plan Designations, or County Zoning, a signed and dated Land Use Designations (LUD) Map, prepared by a licensed surveyor showing all the various districts, designations, zonings, and any subdistricts, shall be submitted for review and approval.
3) If this will be used with a subdivision application AND if there are multiple State Land Use District designations, the applicant shall procure a District Boundary Interpretation from the State Land Use Commission.

(This section to be completed by ZAED)

LAND USE DESIGNATIONS (LUD) AND OTHER ZONING INFORMATION:
STATE LAND USE DISTRICT(S) Urban
COMMUNITY PLAN DESIGNATION(S) Project District 6
COUNTY ZONING(S) Kihei Research & Technology Park
OTHER DESIGNATION(S)/COMMENTS N/A

Yes No
(SMA) SPECIAL MANAGEMENT AREA

Yes No
(PH) PLANNED DEVELOPMENT

Yes No
(PD) PROJECT DISTRICT

Yes No See Additional Comments On Page Two

Yes No See The Attached Land Use Designation Map

FLOOD INFORMATION:

FLOOD HAZARD AREA ZONE(S) X For Flood Zone AO, FLOOD DEPTH N/A
BASE FLOOD ELEVATION(S) N/A feet mean sea level, Local Tidal Datum.

*FLOODWAY Yes No *FLOOD DEVELOPMENT PERMIT REQUIRED Yes No
* For flood hazard area zones X or XS, a flood development permit would be required if any work is done in any drainage facility or stream area that would reduce the capacity of the drainage facility, river, or stream, or adversely affect downstream property.
* For subdivisions in ALL FLOOD HAZARD AREA ZONES (including zones X or XS) that involve streams, gulches, low areas, or any type of draingeway, a designation of the 100 year flood inundation limits or a drainage reserve may be required.

SUBDIVISION CONSISTENCY:

N/A (Not Applicable)

- **The Land Use Designations (LUD) align and a unilateral agreement is not required.
- **The LUD's do not align and the available or proposed land uses appear to be:
 Consistent, with a Department of Public Works / Planning unilateral agreement.
 Not Consistent. Comments: _____

(Signature)
Except as permitted in Section 18.04.030(B) MCC, property containing Interim Zoning shall NOT be subdivided.

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REVIEWED & CONFIRMED BY:

[Signature] 12/19/11
(Signature) (Date)

For: AARON SHINMOTO, Planning Program Administrator, Zoning Administration and Enforcement Division

DEC 15 2011

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COUNTY OF MAUI
DEPARTMENT OF PLANNING
Kalana Pakui Building
250 South High Street
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Enforcement Division (ZAED)
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Facsimile: (808) 270-7634
E-mail: planning@mauicounty.gov

ZONING AND FLOOD CONFIRMATION FORM

(This section to be completed by the Applicant)

APPLICANT NAME Maui R&T Partners, LLC. (Brett Davis, Planner) TELEPHONE 808-270-1561

PROJECT NAME Maui Research and Technology Park E-MAIL bdavis@chpmaui.com

PROPERTY ADDRESS Lipoa Parkway mauka of Pillani Highway, Kihei, Maui, HI TAX MAP KEY (2) 2-2-024:034

Yes No Will this Zoning & Flood Confirmation Form be used with a Subdivision Application?
If "Yes", answer questions A and B below:

A) Will it be processed under one of the consistency exemptions of Section 18.04.030(B), MCC? Yes No
If "Yes", which exemption? _____

B) Provide the purpose of subdivision and the proposed land uses below: _____

- NOTE: 1) Use a separate Zoning & Flood Confirmation Form for each Tax Map Key (TMK) number.
2) If this will be used with a subdivision application AND if the zoning information for the subject property contains multiple State Land Use Districts, Community Plan Designations, or County Zoning, a signed and dated Land Use Designations (LUD) Map, prepared by a licensed surveyor showing all the various districts, designations, zonings, and any subdistricts, shall be submitted for review and approval.
3) If this will be used with a subdivision application AND if there are multiple State Land Use District designations, the applicant shall procure a District Boundary Interpretation from the State Land Use Commission.

(This section to be completed by ZAED)

LAND USE DESIGNATIONS (LUD) AND OTHER ZONING INFORMATION:

STATE LAND USE DISTRICT(S) Urban

COMMUNITY PLAN DESIGNATION(S) PD-C - Project District C R&T Park

COUNTY ZONING(S) R&T Kehei - Kihei Research & Technology Park

OTHER DESIGNATION(S)/COMMENTS _____

Yes No
See Additional Comments On Page Two

Yes No
See The Attached Land Use Designation Map

Yes No
(SMA) SPECIAL MANAGEMENT AREA

Yes No
(PH) PLANNED DEVELOPMENT

Yes No
(PD) PROJECT DISTRICT

FLOOD INFORMATION:

FLOOD HAZARD AREA ZONE(S) X For Flood Zone AO, FLOOD DEPTH _____

BASE FLOOD ELEVATION(S) N/A feet mean sea level, Local Tidal Datum.

*FLOODWAY Yes No *FLOOD DEVELOPMENT PERMIT REQUIRED Yes No

- * For flood hazard area zones X or XS, a flood development permit would be required if any work is done in any drainage facility or stream area that would reduce the capacity of the drainage facility, river, or stream, or adversely affect downstream property.
* For subdivisions in ALL FLOOD HAZARD AREA ZONES (including zones X or XS) that involve streams, gulches, low areas, or any type of drainage, a designation of the 100 year flood inundation limits or a drainage reserve may be required.

SUBDIVISION CONSISTENCY: N/A (Not Applicable)

**The Land Use Designations (LUD) align and a unilateral agreement is not required.

**The LUD's do not align and the available or proposed land uses appear to be:

Consistent, with a Department of Public Works / Planning unilateral agreement.

Not Consistent. Comments: _____

(Signature)
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REVIEWED & CONFIRMED BY:

[Signature] (SP)

12/16/11

For: AARON SHINMOTO, Planning Program Administrator, Zoning Administration and Enforcement Division

DEC 15 2011

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COUNTY OF MAUI
DEPARTMENT OF PLANNING
Kalana Pakui Building
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ZONING AND FLOOD CONFIRMATION FORM

(This section to be completed by the Applicant)

APPLICANT NAME Maui R&T Partners, LLC. (Brett Davis, Planner) TELEPHONE 808-270-1561

PROJECT NAME Maui Research and Technology Park E-MAIL bdavis@chpmaui.com

PROPERTY ADDRESS Lipoa Parkway mauka of Piilani Highway, Kihei, Maui, HI TAX MAP KEY (2) 2-2-024:036

Yes No Will this Zoning & Flood Confirmation Form be used with a Subdivision Application?

If "Yes", answer questions A and B below:

A) Will it be processed under one of the consistency exemptions of Section 18.04.030(B), MCC? Yes No

If "Yes", which exemption? _____

B) Provide the purpose of subdivision and the proposed land uses below: _____

- NOTE: 1) Use a separate Zoning & Flood Confirmation Form for each Tax Map Key (TMK) number.
 2) If this will be used with a subdivision application AND if the zoning information for the subject property contains multiple State Land Use Districts, Community Plan Designations, or County Zoning, a signed and dated Land Use Designations (LUD) Map, prepared by a licensed surveyor showing all the various districts, designations, zonings, and any subdistricts, shall be submitted for review and approval.
 3) If this will be used with a subdivision application AND if there are multiple State Land Use District designations, the applicant shall procure a District Boundary Interpretation from the State Land Use Commission.

(This section to be completed by ZAED)

LAND USE DESIGNATIONS (LUD) AND OTHER ZONING INFORMATION:

STATE LAND USE DISTRICT(S) Urban, may include Agriculture *

COMMUNITY PLAN DESIGNATION(S) Project District 6

COUNTY ZONING(S) Kihei Research & Technology Park

OTHER DESIGNATION(S)/COMMENTS Confirm w/ state *

Yes No
See Additional Comments On Page Two

Yes No
See The Attached Land Use Designation Map

Yes No
(SMA) SPECIAL
MANAGEMENT
AREA

Yes No
(PH) PLANNED
DEVELOPMENT

Yes No
(PD) PROJECT
DISTRICT

FLOOD INFORMATION:

FLOOD HAZARD AREA ZONE(S) X For Flood Zone AO, FLOOD DEPTH N/A

BASE FLOOD ELEVATION(S) N/A feet mean sea level, Local Tidal Datum.

*FLOODWAY Yes No *FLOOD DEVELOPMENT PERMIT REQUIRED Yes No

* For flood hazard area zones X or XS, a flood development permit would be required if any work is done in any drainage facility or stream area that would reduce the capacity of the drainage facility, river, or stream, or adversely affect downstream property.

* For subdivisions in ALL FLOOD HAZARD AREA ZONES (including zones X or XS) that involve streams, gulches, low areas, or any type of draingeway, a designation of the 100 year flood inundation limits or a drainage reserve may be required.

SUBDIVISION CONSISTENCY: N/A (Not Applicable)

**The Land Use Designations (LUD) align and a unilateral agreement is not required.

**The LUD's do not align and the available or proposed land uses appear to be:

Consistent, with a Department of Public Works / Planning unilateral agreement.

Not Consistent. Comments: _____

(Signature)
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** All proposed subdivisions will be further reviewed during the subdivision application process to verify consistency, unilateral agreement requirements, and the conditions associated with a unilateral agreement [Section 18.04.030(D), Maui County Code].

REVIEWED & CONFIRMED BY:

Aaron Shinmoto
(Signature)

12/20/11
(Date)

For: AARON SHINMOTO, Planning Program Administrator, Zoning Administration and Enforcement Division

DEC 15 2011
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ZONING AND FLOOD CONFIRMATION FORM

(This section to be completed by the Applicant)

APPLICANT NAME Maui R&T Partners, LLC. (Brett Davis, Planner) TELEPHONE 808-270-1561
PROJECT NAME Maui Research and Technology Park E-MAIL bdavis@chpmaui.com
PROPERTY ADDRESS Lipoa Parkway mauka of Piilani Highway, Kihei, Maui, HI TAX MAP KEY (2) 2-2-024:037

Yes No Will this Zoning & Flood Confirmation Form be used with a Subdivision Application?
If "Yes", answer questions A and B below:

A) Will it be processed under one of the consistency exemptions of Section 18.04.030(B), MCC? Yes No
If "Yes", which exemption? _____

B) Provide the purpose of subdivision and the proposed land uses below: _____

- NOTE: 1) Use a separate Zoning & Flood Confirmation Form for each Tax Map Key (TMK) number.
2) If this will be used with a subdivision application AND if the zoning information for the subject property contains multiple State Land Use Districts, Community Plan Designations, or County Zoning, a signed and dated Land Use Designations (LUD) Map, prepared by a licensed surveyor showing all the various districts, designations, zonings, and any subdistricts, shall be submitted for review and approval.
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(This section to be completed by ZAED)

LAND USE DESIGNATIONS (LUD) AND OTHER ZONING INFORMATION:

STATE LAND USE DISTRICT(S) Urban
COMMUNITY PLAN DESIGNATION(S) Project District 6
COUNTY ZONING(S) Kihei Research & Technology Park
OTHER DESIGNATION(S)/COMMENTS N/A

Yes No
(SMA) SPECIAL MANAGEMENT AREA

Yes No
(PH) PLANNED DEVELOPMENT

Yes No
(PD) PROJECT DISTRICT

Yes No See Additional Comments On Page Two

Yes No See The Attached Land Use Designation Map

FLOOD INFORMATION:

FLOOD HAZARD AREA ZONE(S) X For Flood Zone AO, FLOOD DEPTH N/A
BASE FLOOD ELEVATION(S) N/A feet mean sea level, Local Tidal Datum.
*FLOODWAY Yes No *FLOOD DEVELOPMENT PERMIT REQUIRED Yes No

* For flood hazard area zones X or XS, a flood development permit would be required if any work is done in any drainage facility or stream area that would reduce the capacity of the drainage facility, river, or stream, or adversely affect downstream property.
* For subdivisions in ALL FLOOD HAZARD AREA ZONES (including zones X or XS) that involve streams, gulches, low areas, or any type of drainage, a designation of the 100 year flood inundation limits or a drainage reserve may be required.

SUBDIVISION CONSISTENCY:

N/A (Not Applicable)

- **The Land Use Designations (LUD) align and a unilateral agreement is not required.
- **The LUD's do not align and the available or proposed land uses appear to be:
- Consistent, with a Department of Public Works / Planning unilateral agreement.
- Not Consistent. Comments: _____

(Signature)
Except as permitted in Section 18.04.030(B) MCC, property containing Interim Zoning shall NOT be subdivided.

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REVIEWED & CONFIRMED BY:

[Signature] For: AARON SHINMOTO, Planning Program Administrator, Zoning Administration and Enforcement Division
12/19/11 (Date)

DEC 15 2011

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ZONING AND FLOOD CONFIRMATION FORM

(This section to be completed by the Applicant)

APPLICANT NAME Maui R&T Partners, LLC. (Brett Davis, Planner) TELEPHONE 808-270-1561
PROJECT NAME Maui Research and Technology Park E-MAIL bdavis@chpmaui.com
PROPERTY ADDRESS Lipoa Parkway mauka of Piilani Highway, Kihei, Maui, HI TAX MAP KEY (2) 2-2-024:038

Yes No Will this Zoning & Flood Confirmation Form be used with a Subdivision Application?
If "Yes", answer questions A and B below:
A) Will it be processed under one of the consistency exemptions of Section 18.04.030(B), MCC? Yes No
If "Yes", which exemption? _____
B) Provide the purpose of subdivision and the proposed land uses below:

- NOTE: 1) Use a separate Zoning & Flood Confirmation Form for each Tax Map Key (TMK) number.
 2) If this will be used with a subdivision application AND if the zoning information for the subject property contains multiple State Land Use Districts, Community Plan Designations, or County Zoning, a signed and dated Land Use Designations (LUD) Map, prepared by a licensed surveyor showing all the various districts, designations, zonings, and any subdistricts, shall be submitted for review and approval.
 3) If this will be used with a subdivision application AND if there are multiple State Land Use District designations, the applicant shall procure a District Boundary Interpretation from the State Land Use Commission.

(This section to be completed by ZAED)

LAND USE DESIGNATIONS (LUD) AND OTHER ZONING INFORMATION:

STATE LAND USE DISTRICT(S) Urban, may include Agriculture*
COMMUNITY PLAN DESIGNATION(S) Project District 6
COUNTY ZONING(S) Kihei Research & Technology Park
OTHER DESIGNATION(S)/COMMENTS Confirm w/ State*

Yes No
(SMA) SPECIAL MANAGEMENT AREA

Yes No
(PH) PLANNED DEVELOPMENT

Yes No
(PD) PROJECT DISTRICT

Yes No See Additional Comments On Page Two

Yes No See The Attached Land Use Designation Map

FLOOD INFORMATION:

FLOOD HAZARD AREA ZONE(S) X For Flood Zone AO, FLOOD DEPTH N/A
BASE FLOOD ELEVATION(S) N/A feet mean sea level, Local Tidal Datum.

*FLOODWAY Yes No *FLOOD DEVELOPMENT PERMIT REQUIRED Yes No
 * For flood hazard area zones X or XS, a flood development permit would be required if any work is done in any drainage facility or stream area that would reduce the capacity of the drainage facility, river, or stream, or adversely affect downstream property.
 * For subdivisions in ALL FLOOD HAZARD AREA ZONES (including zones X or XS) that involve streams, gulches, low areas, or any type of draingeway, a designation of the 100 year flood inundation limits or a drainage reserve may be required.

SUBDIVISION CONSISTENCY: N/A (Not Applicable)

**The Land Use Designations (LUD) align and a unilateral agreement is not required.

**The LUD's do not align and the available or proposed land uses appear to be:

Consistent, with a Department of Public Works / Planning unilateral agreement.

Not Consistent. Comments: _____

(Signature)
Except as permitted in Section 18.04.030(B) MCC, property containing Interim Zoning shall NOT be subdivided.

** All proposed subdivisions will be further reviewed during the subdivision application process to verify consistency, unilateral agreement requirements, and the conditions associated with a unilateral agreement [Section 18.04.030(D), Maui County Code].

REVIEWED & CONFIRMED BY:

[Signature]
(Signature)

12/19/11
(Date)

For: AARON SHINMOTO, Planning Program Administrator, Zoning Administration and Enforcement Division

DEC 15 2011

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COUNTY OF MAUI
DEPARTMENT OF PLANNING
Kalana Pakui Building
250 South High Street
Wailuku, Hawaii 96793



Zoning Administration and
Enforcement Division (ZAED)
Telephone: (808) 270-7253
Facsimile: (808) 270-7634
E-mail: planning@mauicounty.gov

ZONING AND FLOOD CONFIRMATION FORM

(This section to be completed by the Applicant)

APPLICANT NAME Maui R&T Partners, LLC. (Brett Davis, Planner) TELEPHONE 808-270-1561
PROJECT NAME Maui Research and Technology Park E-MAIL bdavis@chpmaui.com
PROPERTY ADDRESS Lipoa Parkway mauka of Piilani Highway, Kihei, Maui, HI TAX MAP KEY (2) 2-2-024:039

Yes No Will this Zoning & Flood Confirmation Form be used with a Subdivision Application?
If "Yes", answer questions A and B below:

A) Will it be processed under one of the consistency exemptions of Section 18.04.030(B), MCC? Yes No
If "Yes", which exemption? _____

B) Provide the purpose of subdivision and the proposed land uses below: _____

- NOTE: 1) Use a separate Zoning & Flood Confirmation Form for each Tax Map Key (TMK) number.
2) If this will be used with a subdivision application AND if the zoning information for the subject property contains multiple State Land Use Districts, Community Plan Designations, or County Zoning, a signed and dated Land Use Designations (LUD) Map, prepared by a licensed surveyor showing all the various districts, designations, zonings, and any subdistricts, shall be submitted for review and approval.
3) If this will be used with a subdivision application AND if there are multiple State Land Use District designations, the applicant shall procure a District Boundary Interpretation from the State Land Use Commission.

(This section to be completed by ZAED)

LAND USE DESIGNATIONS (LUD) AND OTHER ZONING INFORMATION:
STATE LAND USE DISTRICT(S) Urban, may include Agriculture *
COMMUNITY PLAN DESIGNATION(S) Project District 6
COUNTY ZONING(S) Kihei Research & Technology Park
OTHER DESIGNATION(S)/COMMENTS Confirm w/ State *

Yes No
(SMA) SPECIAL MANAGEMENT AREA

Yes No
(PH) PLANNED DEVELOPMENT

Yes No
(PD) PROJECT DISTRICT

Yes No See Additional Comments On Page Two

Yes No See The Attached Land Use Designation Map

FLOOD INFORMATION:
FLOOD HAZARD AREA ZONE(S) X For Flood Zone AO, FLOOD DEPTH N/A
BASE FLOOD ELEVATION(S) N/A feet mean sea level, Local Tidal Datum.
*FLOODWAY Yes No *FLOOD DEVELOPMENT PERMIT REQUIRED Yes No
* For flood hazard area zones X or XS, a flood development permit would be required if any work is done in any drainage facility or stream area that would reduce the capacity of the drainage facility, river, or stream, or adversely affect downstream property.
* For subdivisions in ALL FLOOD HAZARD AREA ZONES (including zones X or XS) that involve streams, gulches, low areas, or any type of drainage, a designation of the 100 year flood inundation limits or a drainage reserve may be required.

SUBDIVISION CONSISTENCY: N/A (Not Applicable)

**The Land Use Designations (LUD) align and a unilateral agreement is not required.
 **The LUD's do not align and the available or proposed land uses appear to be:
 Consistent, with a Department of Public Works / Planning unilateral agreement.
 Not Consistent. Comments: _____

Except as permitted in Section 18.04.030(B) MCC, property containing Interim Zoning shall NOT be subdivided.

** All proposed subdivisions will be further reviewed during the subdivision application process to verify consistency, unilateral agreement requirements, and the conditions associated with a unilateral agreement [Section 18.04.030(D), Maui County Code].

REVIEWED & CONFIRMED BY: [Signature] 12/19/11
(Signature) (Date)
For: AARON SHINMOTO, Planning Program Administrator, Zoning Administration and Enforcement Division

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COUNTY OF MAUI
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Wailuku, Hawaii 96793



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Facsimile: (808) 270-7634
E-mail: planning@mauicounty.gov

ZONING AND FLOOD CONFIRMATION FORM

(This section to be completed by the Applicant)

APPLICANT NAME Maui R&T Partners, LLC. (Brett Davis, Planner) TELEPHONE 808-270-1561
PROJECT NAME Maui Research and Technology Park E-MAIL bdavis@chpmaui.com
PROPERTY ADDRESS Lipoa Parkway mauka of Piilani Highway, Kihei, Maui, HI TAX MAP KEY (2) 2-2-024:040

Yes No Will this Zoning & Flood Confirmation Form be used with a Subdivision Application?
If "Yes", answer questions A and B below:

A) Will it be processed under one of the consistency exemptions of Section 18.04.030(B), MCC? Yes No
If "Yes", which exemption? _____

B) Provide the purpose of subdivision and the proposed land uses below: _____

- NOTE: 1) Use a separate Zoning & Flood Confirmation Form for each Tax Map Key (TMK) number.
2) If this will be used with a subdivision application AND if the zoning information for the subject property contains multiple State Land Use Districts, Community Plan Designations, or County Zoning, a signed and dated Land Use Designations (LUD) Map, prepared by a licensed surveyor showing all the various districts, designations, zonings, and any subdistricts, shall be submitted for review and approval.
3) If this will be used with a subdivision application AND if there are multiple State Land Use District designations, the applicant shall procure a District Boundary Interpretation from the State Land Use Commission.

(This section to be completed by ZAED)

LAND USE DESIGNATIONS (LUD) AND OTHER ZONING INFORMATION:
STATE LAND USE DISTRICT(S) Urban, may include Agriculture *
COMMUNITY PLAN DESIGNATION(S) Project District 6
COUNTY ZONING(S) Kihei Research & Technology Park
OTHER DESIGNATION(S)/COMMENTS Confirm w/ State *

Yes No See Additional Comments On Page Two
 Yes No See The Attached Land Use Designation Map

Yes No (SMA) SPECIAL MANAGEMENT AREA
 Yes No (PH) PLANNED DEVELOPMENT
 Yes No (PD) PROJECT DISTRICT

FLOOD INFORMATION:
FLOOD HAZARD AREA ZONE(S) X For Flood Zone AO, FLOOD DEPTH N/A
BASE FLOOD ELEVATION(S) N/A feet mean sea level, Local Tidal Datum.
*FLOODWAY Yes No *FLOOD DEVELOPMENT PERMIT REQUIRED Yes No
* For flood hazard area zones X or XS, a flood development permit would be required if any work is done in any drainage facility or stream area that would reduce the capacity of the drainage facility, river, or stream, or adversely affect downstream property.
* For subdivisions in ALL FLOOD HAZARD AREA ZONES (including zones X or XS) that involve streams, gulches, low areas, or any type of draingeway, a designation of the 100 year flood inundation limits or a drainage reserve may be required.

SUBDIVISION CONSISTENCY: N/A (Not Applicable)
 **The Land Use Designations (LUD) align and a unilateral agreement is not required.
 **The LUD's do not align and the available or proposed land uses appear to be:
 Consistent, with a Department of Public Works / Planning unilateral agreement.
 Not Consistent. Comments: _____

Except as permitted in Section 18.04.030(B) MCC, property containing Interim Zoning shall NOT be subdivided.

** All proposed subdivisions will be further reviewed during the subdivision application process to verify consistency, unilateral agreement requirements, and the conditions associated with a unilateral agreement [Section 18.04.030(D), Maui County Code].

REVIEWED & CONFIRMED BY:
[Signature] (Signature) 12/19/11 (Date)
For: AARON SHINMOTO, Planning Program Administrator, Zoning Administration and Enforcement Division

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ZONING AND FLOOD CONFIRMATION FORM

(This section to be completed by the Applicant)

APPLICANT NAME Maui R&T Partners, LLC. (Brett Davis, Planner) TELEPHONE 808-270-1561
PROJECT NAME Maui Research and Technology Park E-MAIL bdavis@chpmaui.com
PROPERTY ADDRESS Lipoa Parkway mauka of Piilani Highway, Kihei, Maui, HI TAX MAP KEY (2) 2-2-024:041

Yes No Will this Zoning & Flood Confirmation Form be used with a Subdivision Application?
If "Yes", answer questions A and B below:

A) Will it be processed under one of the consistency exemptions of Section 18.04.030(B), MCC? Yes No
If "Yes", which exemption? _____

B) Provide the purpose of subdivision and the proposed land uses below:

- NOTE: 1) Use a separate Zoning & Flood Confirmation Form for each Tax Map Key (TMK) number.
2) If this will be used with a subdivision application AND if the zoning information for the subject property contains multiple State Land Use Districts, Community Plan Designations, or County Zoning, a signed and dated Land Use Designations (LUD) Map, prepared by a licensed surveyor showing all the various districts, designations, zonings, and any subdistricts, shall be submitted for review and approval.
3) If this will be used with a subdivision application AND if there are multiple State Land Use District designations, the applicant shall procure a District Boundary Interpretation from the State Land Use Commission.

(This section to be completed by ZAED)

LAND USE DESIGNATIONS (LUD) AND OTHER ZONING INFORMATION:
STATE LAND USE DISTRICT(S) Urban
COMMUNITY PLAN DESIGNATION(S) Project District 6
COUNTY ZONING(S) Kihei Research + Technology Park
OTHER DESIGNATION(S)/COMMENTS N/A

Yes No
(SMA) SPECIAL MANAGEMENT AREA

Yes No
(PH) PLANNED DEVELOPMENT

Yes No
(PD) PROJECT DISTRICT

Yes No See Additional Comments On Page Two

Yes No See The Attached Land Use Designation Map

FLOOD INFORMATION:
FLOOD HAZARD AREA ZONE(S) X For Flood Zone AO, FLOOD DEPTH N/A
BASE FLOOD ELEVATION(S) N/A feet mean sea level, Local Tidal Datum.
*FLOODWAY Yes No *FLOOD DEVELOPMENT PERMIT REQUIRED Yes No
* For flood hazard area zones X or XS, a flood development permit would be required if any work is done in any drainage facility or stream area that would reduce the capacity of the drainage facility, river, or stream, or adversely affect downstream property.
* For subdivisions in ALL FLOOD HAZARD AREA ZONES (including zones X or XS) that involve streams, gulches, low areas, or any type of draingeway, a designation of the 100 year flood inundation limits or a drainage reserve may be required.

SUBDIVISION CONSISTENCY: N/A (Not Applicable)

**The Land Use Designations (LUD) align and a unilateral agreement is not required.
 **The LUD's do not align and the available or proposed land uses appear to be:
 Consistent, with a Department of Public Works / Planning unilateral agreement.
 Not Consistent. Comments: _____

Except as permitted in Section 18.04.030(B) MCC, property containing Interim Zoning shall NOT be subdivided.

** All proposed subdivisions will be further reviewed during the subdivision application process to verify consistency, unilateral agreement requirements, and the conditions associated with a unilateral agreement [Section 18.04.030(D), Maui County Code].

REVIEWED & CONFIRMED BY:
[Signature] (Signature) 12/19/11 (Date)
For: AARON SHINMOTO, Planning Program Administrator, Zoning Administration and Enforcement Division

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COUNTY OF MAUI
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250 South High Street
Wailuku, Hawaii 96793



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Telephone: (808) 270-7253
Facsimile: (808) 270-7634
E-mail: planning@mauicounty.gov

ZONING AND FLOOD CONFIRMATION FORM

(This section to be completed by the Applicant)

APPLICANT NAME Maui R&T Partners, LLC. (Brett Davis, Planner) TELEPHONE 808-270-1561
PROJECT NAME Maui Research and Technology Park E-MAIL bdavis@chpmaui.com
PROPERTY ADDRESS Lipoa Parkway mauka of Piilani Highway, Kihei, Maui, HI TAX MAP KEY (2) 2-2-024:042

Yes No Will this Zoning & Flood Confirmation Form be used with a Subdivision Application?
If "Yes", answer questions A and B below:

A) Will it be processed under one of the consistency exemptions of Section 18.04.030(B), MCC? Yes No
If "Yes", which exemption? _____

B) Provide the purpose of subdivision and the proposed land uses below: _____

- NOTE: 1) Use a separate Zoning & Flood Confirmation Form for each Tax Map Key (TMK) number.
2) If this will be used with a subdivision application AND if the zoning information for the subject property contains multiple State Land Use Districts, Community Plan Designations, or County Zoning, a signed and dated Land Use Designations (LUD) Map, prepared by a licensed surveyor showing all the various districts, designations, zonings, and any subdistricts, shall be submitted for review and approval.
3) If this will be used with a subdivision application AND if there are multiple State Land Use District designations, the applicant shall procure a District Boundary Interpretation from the State Land Use Commission.

(This section to be completed by ZAED)

LAND USE DESIGNATIONS (LUD) AND OTHER ZONING INFORMATION:

STATE LAND USE DISTRICT(S) Urban
COMMUNITY PLAN DESIGNATION(S) Project District 6
COUNTY ZONING(S) Kihei Research & Technology Park
OTHER DESIGNATION(S)/COMMENTS N/A

Yes No
(SMA) SPECIAL MANAGEMENT AREA

Yes No
(PH) PLANNED DEVELOPMENT

Yes No
(PD) PROJECT DISTRICT

Yes No See Additional Comments On Page Two

Yes No See The Attached Land Use Designation Map

FLOOD INFORMATION:

FLOOD HAZARD AREA ZONE(S) X For Flood Zone AO, FLOOD DEPTH N/A
BASE FLOOD ELEVATION(S) N/A feet mean sea level, Local Tidal Datum.
*FLOODWAY Yes No *FLOOD DEVELOPMENT PERMIT REQUIRED Yes No

* For flood hazard area zones X or XS, a flood development permit would be required if any work is done in any drainage facility or stream area that would reduce the capacity of the drainage facility, river, or stream, or adversely affect downstream property.
* For subdivisions in ALL FLOOD HAZARD AREA ZONES (including zones X or XS) that involve streams, gulches, low areas, or any type of draingeway, a designation of the 100 year flood inundation limits or a drainage reserve may be required.

SUBDIVISION CONSISTENCY:

N/A (Not Applicable)

**The Land Use Designations (LUD) align and a unilateral agreement is not required.

**The LUD's do not align and the available or proposed land uses appear to be:

Consistent, with a Department of Public Works / Planning unilateral agreement.

Not Consistent. Comments: _____

(Signature)
Except as permitted in Section 18.04.030(B) MCC, property containing Interim Zoning shall NOT be subdivided.

** All proposed subdivisions will be further reviewed during the subdivision application process to verify consistency, unilateral agreement requirements, and the conditions associated with a unilateral agreement [Section 18.04.030(D), Maui County Code].

REVIEWED & CONFIRMED BY:

[Signature]
(Signature)

12/19/11
(Date)

For: AARON SHINMOTO, Planning Program Administrator, Zoning Administration and Enforcement Division

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COUNTY OF MAUI
DEPARTMENT OF PLANNING
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250 South High Street
Wailuku, Hawaii 96793



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Enforcement Division (ZAED)
Telephone: (808) 270-7253
Facsimile: (808) 270-7634
E-mail: planning@mauicounty.gov

ZONING AND FLOOD CONFIRMATION FORM

(This section to be completed by the Applicant)

APPLICANT NAME Maui R&T Partners, LLC. (Brett Davis, Planner) TELEPHONE 808-270-1561

PROJECT NAME Maui Research and Technology Park E-MAIL bdavis@chpmaui.com

PROPERTY ADDRESS Lipoa Parkway mauka of Piilani Highway, Kihei, Maui, HI TAX MAP KEY (2) 2-2-024:043

Yes No Will this Zoning & Flood Confirmation Form be used with a Subdivision Application?
If "Yes", answer questions A and B below:

A) Will it be processed under one of the consistency exemptions of Section 18.04.030(B), MCC? Yes No
If "Yes", which exemption? _____

B) Provide the purpose of subdivision and the proposed land uses below: _____

- NOTE: 1) Use a separate Zoning & Flood Confirmation Form for each Tax Map Key (TMK) number.
 2) If this will be used with a subdivision application AND if the zoning information for the subject property contains multiple State Land Use Districts, Community Plan Designations, or County Zoning, a signed and dated Land Use Designations (LUD) Map, prepared by a licensed surveyor showing all the various districts, designations, zonings, and any subdistricts, shall be submitted for review and approval.
 3) If this will be used with a subdivision application AND if there are multiple State Land Use District designations, the applicant shall procure a District Boundary Interpretation from the State Land Use Commission.

(This section to be completed by ZAED)

LAND USE DESIGNATIONS (LUD) AND OTHER ZONING INFORMATION:

STATE LAND USE DISTRICT(S) Urban

COMMUNITY PLAN DESIGNATION(S) Project District 6

COUNTY ZONING(S) Kihei Research & Technology Park

OTHER DESIGNATION(S)/COMMENTS N/A

Yes No
See Additional Comments On Page Two

Yes No
See The Attached Land Use Designation Map

Yes No
(SMA) SPECIAL
MANAGEMENT
AREA

Yes No
(PH) PLANNED
DEVELOPMENT

Yes No
(PD) PROJECT
DISTRICT

FLOOD INFORMATION:

FLOOD HAZARD AREA ZONE(S) X For Flood Zone AO, FLOOD DEPTH N/A

BASE FLOOD ELEVATION(S) N/A feet mean sea level, Local Tidal Datum.

*FLOODWAY Yes No *FLOOD DEVELOPMENT PERMIT REQUIRED Yes No

* For flood hazard area zones X or XS, a flood development permit would be required if any work is done in any drainage facility or stream area that would reduce the capacity of the drainage facility, river, or stream, or adversely affect downstream property.

* For subdivisions in ALL FLOOD HAZARD AREA ZONES (including zones X or XS) that involve streams, gulches, low areas, or any type of drainageway, a designation of the 100 year flood inundation limits or a drainage reserve may be required.

SUBDIVISION CONSISTENCY: N/A (Not Applicable)

**The Land Use Designations (LUD) align and a unilateral agreement is not required.

**The LUD's do not align and the available or proposed land uses appear to be:

Consistent, with a Department of Public Works / Planning unilateral agreement.

Not Consistent. Comments: _____

(Signature)
Except as permitted in Section 18.04.030(B) MCC, property containing Interim Zoning shall NOT be subdivided.

** All proposed subdivisions will be further reviewed during the subdivision application process to verify consistency, unilateral agreement requirements, and the conditions associated with a unilateral agreement [Section 18.04.030(D), Maui County Code].

REVIEWED & CONFIRMED BY:

Aaron Shinmoto
(Signature)

12/19/11
(Date)

For: AARON SHINMOTO, Planning Program Administrator, Zoning Administration and Enforcement Division

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COUNTY OF MAUI
DEPARTMENT OF PLANNING
Kalana Pakui Building
250 South High Street
Wailuku, Hawaii 96793



Zoning Administration and
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Facsimile: (808) 270-7634
E-mail: planning@mauicounty.gov

ZONING AND FLOOD CONFIRMATION FORM

(This section to be completed by the Applicant)

APPLICANT NAME Maui R&T Partners, LLC. (Brett Davis, Planner) TELEPHONE 808-270-1561
PROJECT NAME Maui Research and Technology Park E-MAIL bdavis@chpmaui.com
PROPERTY ADDRESS Lipoa Parkway mauka of Piilani Highway, Kihei, Maui, HI TAX MAP KEY (2) 2-2-024:044

Yes No Will this Zoning & Flood Confirmation Form be used with a Subdivision Application?
If "Yes", answer questions A and B below:

A) Will it be processed under one of the consistency exemptions of Section 18.04.030(B), MCC? Yes No
If "Yes", which exemption? _____

B) Provide the purpose of subdivision and the proposed land uses below:

- NOTE: 1) Use a separate Zoning & Flood Confirmation Form for each Tax Map Key (TMK) number.
2) If this will be used with a subdivision application AND if the zoning information for the subject property contains multiple State Land Use Districts, Community Plan Designations, or County Zoning, a signed and dated Land Use Designations (LUD) Map, prepared by a licensed surveyor showing all the various districts, designations, zonings, and any subdistricts, shall be submitted for review and approval.
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(This section to be completed by ZAED)

LAND USE DESIGNATIONS (LUD) AND OTHER ZONING INFORMATION:
STATE LAND USE DISTRICT(S) Urban
COMMUNITY PLAN DESIGNATION(S) Project District 6
COUNTY ZONING(S) Kihei Research & Technology Park
OTHER DESIGNATION(S)/COMMENTS N/A

Yes No
(SMA) SPECIAL MANAGEMENT AREA

Yes No
(PH) PLANNED DEVELOPMENT

Yes No
(PD) PROJECT DISTRICT

Yes No See Additional Comments On Page Two

Yes No See The Attached Land Use Designation Map

FLOOD INFORMATION:
FLOOD HAZARD AREA ZONE(S) X For Flood Zone AO, FLOOD DEPTH N/A
BASE FLOOD ELEVATION(S) N/A feet mean sea level, Local Tidal Datum.
*FLOODWAY Yes No *FLOOD DEVELOPMENT PERMIT REQUIRED Yes No

* For flood hazard area zones X or XS, a flood development permit would be required if any work is done in any drainage facility or stream area that would reduce the capacity of the drainage facility, river, or stream, or adversely affect downstream property.
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SUBDIVISION CONSISTENCY: N/A (Not Applicable)

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 **The LUD's do not align and the available or proposed land uses appear to be:
 Consistent, with a Department of Public Works / Planning unilateral agreement.
 Not Consistent. Comments: _____

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REVIEWED & CONFIRMED BY:
[Signature] (Signature) 12/19/11 (Date)
For: AARON SHINMOTO, Planning Program Administrator, Zoning Administration and Enforcement Division

DEC 15 2011

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E-mail: planning@mauicounty.gov

ZONING AND FLOOD CONFIRMATION FORM

(This section to be completed by the Applicant)

APPLICANT NAME Maui R&T Partners, LLC. (Brett Davis, Planner) TELEPHONE 808-270-1561
PROJECT NAME Maui Research and Technology Park E-MAIL bdavis@chpmaui.com
PROPERTY ADDRESS Lipoa Parkway mauka of Piilani Highway, Kihei, Maui, HI TAX MAP KEY (2) 2-2-024:045

Yes No Will this Zoning & Flood Confirmation Form be used with a Subdivision Application?
If "Yes", answer questions A and B below:

A) Will it be processed under one of the consistency exemptions of Section 18.04.030(B), MCC? Yes No

If "Yes", which exemption? _____

B) Provide the purpose of subdivision and the proposed land uses below: _____

- NOTE: 1) Use a separate Zoning & Flood Confirmation Form for each Tax Map Key (TMK) number.
 2) If this will be used with a subdivision application AND if the zoning information for the subject property contains multiple State Land Use Districts, Community Plan Designations, or County Zoning, a signed and dated Land Use Designations (LUD) Map, prepared by a licensed surveyor showing all the various districts, designations, zonings, and any subdistricts, shall be submitted for review and approval.
 3) If this will be used with a subdivision application AND if there are multiple State Land Use District designations, the applicant shall procure a District Boundary Interpretation from the State Land Use Commission.

(This section to be completed by ZAED)

LAND USE DESIGNATIONS (LUD) AND OTHER ZONING INFORMATION:

STATE LAND USE DISTRICT(S) Urban
COMMUNITY PLAN DESIGNATION(S) Project District 6
COUNTY ZONING(S) Kihei Research + Technology Park
OTHER DESIGNATION(S)/COMMENTS N/A

Yes No
(SMA) SPECIAL MANAGEMENT AREA

Yes No
(PH) PLANNED DEVELOPMENT

Yes No
(PD) PROJECT DISTRICT

Yes No
See Additional Comments On Page Two

Yes No
See The Attached Land Use Designation Map

FLOOD INFORMATION:

FLOOD HAZARD AREA ZONE(S) X For Flood Zone AO, FLOOD DEPTH N/A

BASE FLOOD ELEVATION(S) N/A feet mean sea level, Local Tidal Datum.

*FLOODWAY Yes No *FLOOD DEVELOPMENT PERMIT REQUIRED Yes No

* For flood hazard area zones X or XS, a flood development permit would be required if any work is done in any drainage facility or stream area that would reduce the capacity of the drainage facility, river, or stream, or adversely affect downstream property.

* For subdivisions in ALL FLOOD HAZARD AREA ZONES (including zones X or XS) that involve streams, gulches, low areas, or any type of drainageway, a designation of the 100 year flood inundation limits or a drainage reserve may be required.

SUBDIVISION CONSISTENCY: N/A (Not Applicable)

**The Land Use Designations (LUD) align and a unilateral agreement is not required.

**The LUD's do not align and the available or proposed land uses appear to be:

Consistent, with a Department of Public Works / Planning unilateral agreement.

Not Consistent. Comments: _____

(Signature)
Except as permitted in Section 18.04.030(B) MCC, property containing Interim Zoning shall NOT be subdivided.

** All proposed subdivisions will be further reviewed during the subdivision application process to verify consistency, unilateral agreement requirements, and the conditions associated with a unilateral agreement [Section 18.04.030(D), Maui County Code].

REVIEWED & CONFIRMED BY:

Aaron Shinmoto
(Signature)

12/19/11
(Date)

For: AARON SHINMOTO, Planning Program Administrator, Zoning Administration and Enforcement Division

DEC 15 2011

RECEIVED

COUNTY OF MAUI
DEPARTMENT OF PLANNING
Kalana Pakui Building
250 South High Street
Wailuku, Hawaii 96793



Zoning Administration and
Enforcement Division (ZAED)
Telephone: (808) 270-7253
Facsimile: (808) 270-7634
E-mail: planning@mauicounty.gov

ZONING AND FLOOD CONFIRMATION FORM

(This section to be completed by the Applicant)

APPLICANT NAME Maui R&T Partners, LLC. (Brett Davis, Planner) TELEPHONE 808-270-1561
PROJECT NAME Maui Research and Technology Park E-MAIL bdavis@chpmaui.com
PROPERTY ADDRESS Lipoa Parkway mauka of Piilani Highway, Kihei, Maui, HI TAX MAP KEY (2) 2-2-002:054 Por.

Yes No Will this Zoning & Flood Confirmation Form be used with a Subdivision Application?
If "Yes", answer questions A and B below:
A) Will it be processed under one of the consistency exemptions of Section 18.04.030(B), MCC? Yes No
If "Yes", which exemption? _____
B) Provide the purpose of subdivision and the proposed land uses below: _____

- NOTE: 1) Use a separate Zoning & Flood Confirmation Form for each Tax Map Key (TMK) number.
2) If this will be used with a subdivision application AND if the zoning information for the subject property contains multiple State Land Use Districts, Community Plan Designations, or County Zoning, a signed and dated Land Use Designations (LUD) Map, prepared by a licensed surveyor showing all the various districts, designations, zonings, and any subdistricts, shall be submitted for review and approval.
3) If this will be used with a subdivision application AND if there are multiple State Land Use District designations, the applicant shall procure a District Boundary Interpretation from the State Land Use Commission.

(This section to be completed by ZAED)

LAND USE DESIGNATIONS (LUD) AND OTHER ZONING INFORMATION:

STATE LAND USE DISTRICT(S) Ag, Agricultural & Urban Open Space
COMMUNITY PLAN DESIGNATION(S) Aggricultural, RDC-Khu R&T, Public/Quasi Public
COUNTY ZONING(S) Aggricultural & open space
OTHER DESIGNATION(S)/COMMENTS Applicant needs to confirm SLL with State

Yes No
(SMA) SPECIAL
MANAGEMENT
AREA
 Yes No
(PH) PLANNED
DEVELOPMENT
 Yes No
(PD) PROJECT
DISTRICT CPD

Yes No See Additional Comments On Page Two
 Yes No See The Attached Land Use Designation Map

FLOOD INFORMATION:

FLOOD HAZARD AREA ZONE(S) X For Flood Zone AO, FLOOD DEPTH _____
BASE FLOOD ELEVATION(S) N/A feet mean sea level, Local Tidal Datum.
*FLOODWAY Yes No *FLOOD DEVELOPMENT PERMIT REQUIRED Yes No

* For flood hazard area zones X or XS, a flood development permit would be required if any work is done in any drainage facility or stream area that would reduce the capacity of the drainage facility, river, or stream, or adversely affect downstream property.
* For subdivisions in ALL FLOOD HAZARD AREA ZONES (including zones X or XS) that involve streams, gulches, low areas, or any type of draingeway, a designation of the 100 year flood inundation limits or a drainage reserve may be required.

SUBDIVISION CONSISTENCY:

N/A (Not Applicable)

**The Land Use Designations (LUD) align and a unilateral agreement is not required.

**The LUD's do not align and the available or proposed land uses appear to be:

Consistent, with a Department of Public Works / Planning unilateral agreement.

Not Consistent. Comments: _____

(Signature)
Except as permitted in Section 18.04.030(B) MCC, property containing Interim Zoning shall NOT be subdivided.

** All proposed subdivisions will be further reviewed during the subdivision application process to verify consistency, unilateral agreement requirements, and the conditions associated with a unilateral agreement [Section 18.04.030(D), Maui County Code].

REVIEWED & CONFIRMED BY:

[Signature]

12/16/11

For: AARON SHINMOTO, Planning Program Administrator, Zoning Administration and Enforcement Division

Chapter 1(c)
Required Submittals
Checklist

REQUIRED SUBMITTALS CHECKLIST



1. This thirteen-page **Community Plan Amendment Application** with all pages completed and included with packet.



2. Evidence that the Applicant is the owner or lessee of record of the real property to be reclassified; OR, if the Applicant is not the owner, a notarized letter of authorization from the owner authorizing the applicant to act on the owner's behalf AND evidence that the authorization is from the legal owner.



3. A copy of the *Notice of Application* (See Page 8), *location map* (Described on Page 2), and *Notarized Affidavit of Mailing of Notice of Application* (See Page 9).



4. List of owners and lessees of real property within a 500 feet radius of the subject parcel boundaries shall be obtained from the most current available list at the Maui County Department of Finance, Real Property Tax Division. This list should include the tax map key numbers and the names and addresses of all owners, lessees, and members of the Board of Directors or managing agents to be notified, including a *parcel notification map* (The *parcel notification map* is a map drawn to scale, clearly identifying the 500 foot boundary surrounding the subject parcel and the parcels within the notification boundary).



5. Legal description and *mylar map* of the subject property drawn to scale and in the format of the attached *Example of Mylar Map* (see Page 13).



6. Two (2) hard copies of a *Project Assessment* document which contains all the items listed in the Section 19.510(D) *Assessment Requirements Checklist* (See Pages 6 and 7). Note: The Department will review the application and request additional copies for agency transmittal.



7. Original and one (1) copy of an environmental assessment or impact statement prepared in accordance with Chapter 343, HRS, and Chapter 11-200, HAR.



8. Any other information as may be required by the Director of Planning or the appropriate Planning Commission of the County.



9. A **non refundable** filing fee payable to *County of Maui, Director of Finance*. (see Fee Schedule, Table A found on the Maui County website)

After reviewing the application packet and certifying that it is ready for processing the Planning Director will notify the Applicant of the number of additional hard and digital copies to be provided for agency review.

Chapter 1(d)
*Assessment
Requirements
Checklist*

SECTION 19.510(D) ASSESSMENT REQUIREMENTS CHECKLIST

Refer to Chapter 19.510, MCC. Compile the items listed below into a *Project Assessment* document, which may include elements of the Chapter 343, HRS environmental assessment or impact statement. In the "Location" column list the document and page number where each item is found.

| D# | Assessment Content Description | Location |
|-----|--|---|
| D1 | Owner identification and signature or written authorization documents. | Volume I Chapters 3 & 4 |
| D2 | Owner's name, address, and phone number. | Volume I Chapter 1a |
| D3 | Agent's name, address, and phone number, if applicable. | Volume I Chapter 1a |
| D4 | Tax map key and street address, if available. | Volume I Chapter 1a |
| D5 | <i>Locational map</i> identifying the site, adjacent roadways, and landmarks (The purpose of <i>locational map</i> is to give an overview depicting the project site in relation to adjacent landmarks and geographic features. Possible formats include marked-up aerial photographs and the <i>location map</i> described on Page 2, among others.). | Volume II Figures 3, 4a, 4b |
| D6 | List of owners and lessees of record within 500 feet and the <i>parcel notification map</i> (described on Page 5). | Volume 1 Chapter V |
| D7 | Analysis of ways in which application conforms to policies and objectives of General Plan and applicable Community Plan. | Volume II Chapter IV Sections E & F |
| D8 | Detailed land use history of parcel(s) to include former and existing state and county land use designations, violations and uses. | Volume II Chapter 2 Section B |
| D9 | Preliminary archaeological and historical data and comments from the Department of Land and Natural Resources (DLNR) and Office of Hawaiian Affairs (OHA). If applicable, a preservation /mitigation plan approved by DLNR and OHA. | Volume II Chapter 3 sections A.8 & B.4 Tables 27 & 28 Appendices D & E |
| D10 | Analysis of secondary impacts of the proposed use on surrounding uses. | Volume II Chapter V Section C |
| D11 | Traffic impact analysis and, if applicable, a traffic master plan with comments from the Department of Transportation (DOT) and the Department of Public Works (DPW). | Volume II Chapter 3 sections D.1 Tables 27 & 28 Volume III, Appendix G |
| D12 | If applicable, an assessment of the impact the proposed use may have on agricultural use of the property with comments from The Department of Agriculture (DOA) and Natural Resources Conservation Service (NRCS). | Volume II Chapter III Section A10 Table 27 Volume IV Appendix J |

continued on back of this page...

SECTION 19.510(D) ASSESSMENT REQUIREMENTS CHECKLIST

...continued from previous page.

| D# | Assessment Content Description | Location |
|-----|---|---|
| D13 | Water source, supply and distribution analysis, and, if applicable, a water master plan which includes comments from the DLNR, Department of Water Supply (DWS), and DPW. | Volume II Chapter 3 sections D.3 Tables 27 & 28 Volume III, Appendix I |
| D14 | Sewage disposal analysis, and comments, if applicable, from the Department of Health (DOH), DLNR, Department of Environmental Management (DEM), and DWS. | Volume II Chapter 3 sections D.4 Tables 27 & 28 Volume III, Appendix F |
| D15 | Solid waste disposal analysis and comments, if applicable, from DOH, DLNR, DEM, and DWS. | Volume II Chapter 3 sections C.5 Tables 27 & 28 Volume III, Appendix F |
| D16 | Identification of environmentally sensitive areas, habitat and botanical features, such as wetlands, streams, endangered plants, etc., and comments, if applicable, from DLNR, US Fish and Wildlife Service (USFWS), and US Army Core of Engineers (USACE). | Volume II Chapter 3 sections A.5 Tables 27 & 28, Appendices C-1 - C-6 |
| D17 | Identification of the existing topographical and drainage patterns and any alterations proposed. | Volume II Chapter 3 section D.2 Tables 27 & 28 Volume III Appendix F |
| D18 | Identification and summary of all meetings held between Applicant and any community group. | Volume II Chapter 8 section A |
| D19 | Dated photographs of site or structure. | Vol. II Figures 9a-9d |
| D20 | Development schedule. | Vol. II Chp. 2 Sec. H Tables 2 & 3 |
| D21 | Schematic site development plans, if applicable, drawn to scale. | Vol. II Figures 2, 10-23, 35-39 |
| D22 | Operations and management of proposed use which may include: number of employees, housing plan, hours of operation, provisions for off-site parking. | Vol. II Chp. III Sec. B2 & 3 |
| D23 | Identification of traditional beach and mountain access trails and additional trails which may be required for public access, and, if applicable, a preservation/mitigation plan and comments from DLNR and OHA. | Volume II Chapter 3 section A.9 Figure 31, Tables 27 & 28 |
| D24 | Identification and assessment of chemicals and fertilizers used, and, if applicable, a mitigation plan and maintenance program and schedule, and comments from DOH, DLNR, USFWS, and US Environmental Protection Agency (USEPA). | Volume II Chapter 3 section A.4 Tables 27 & 28 |
| D25 | Any other information necessary to assess the application. | |

Chapter 1(e)
*Notice of Application
and Location Map*

NOTICE OF APPLICATION

Date: June 15, 2012

TO: **OWNERS/LESSEES**

Please be advised that the undersigned has filed an application for a Community Plan Amendment with the County of Maui, Department of Planning to change the Community Plan land use designation(s) for the following parcel(s):

- 1. Tax Map Key Number: (2) See attached list (see attached location map)
- 2. Location (street address): Access is provided via Lipoa Parkway mauka of Piilani Highway in Kihei
- 3. Existing Land Use Designations:
 - State Land Use District: See attached list
 - Community Plan: See attached list
 - County Zoning: See attached list
 - Other: _____
- 4. Proposed Community Plan Designation: See attached list
- 5. Description of the existing uses on the Property: Maui Research and Technology Park
- 6. Description of the proposed uses on the Property: Expansion of the existing MRTP with residential, commercial and knowledge based industries pursuant to an update of the Master Plan as described in this report.

The Applicant is responsible for ensuring accuracy of the information.

Maui R&T Partners, LLC. (Mr. Michael Rosenfeld)

Owner/Applicant a Delaware limited liability company By: Maui Tech Associates, LLC, a Delaware limited liability company Its Administrative Member

Applicant (if not also Owner)

Signature: Michael Rosenfeld, Its Manager

Signature

1999 Avenue of the Stars Suite 2850

Mailing Address, No. & Street or PO Box

Mailing Address, No. & Street or PO Box

Los Angeles CA 90067

City, State, Zip Code

City, State, Zip Code

310-824-2200

Telephone

Telephone

Parcels subject to CPA Owned by Maui R&T Partners, LLC. and others

| <u>Parcel Type</u> | <u>TMK</u> | <u>Acreage</u> | <u>STATE</u> | <u>EXISTING ZONING</u> | <u>EXISTING COMMUNITY PLAN</u> | <u>PROPOSED COMMUNITY PLAN</u> |
|--------------------|-------------------|----------------|--------------|---|--------------------------------|--|
| LOT | (2)2-2-24:02 | 5.145 | Urban | Kihei Research & Technology Park District | Project District 6 | Maui Research & Technology Park District |
| LOT | (2)2-2-24:03 | 2.781 | Urban | Kihei Research & Technology Park District | Project District 6 | Maui Research & Technology Park District |
| LOT | (2)2-2-24:04 | 2.676 | Urban | Kihei Research & Technology Park District | Project District 6 | Maui Research & Technology Park District |
| LOT | (2)2-2-24:05 | 2.435 | Urban | Kihei Research & Technology Park District | Project District 6 | Maui Research & Technology Park District |
| LOT | (2)2-2-24:06 | 2.743 | Urban | Kihei Research & Technology Park District | Project District 6 | Maui Research & Technology Park District |
| LOT | (2)2-2-24:07 | 2.815 | Urban | Kihei Research & Technology Park District | Project District 6 | Maui Research & Technology Park District |
| LOT | (2)2-2-24:08 | 2.342 | Urban | Kihei Research & Technology Park District | Project District 6 | Maui Research & Technology Park District |
| ROADWAY | (2)2-2-24:09 | 5.563 | Urban | Kihei Research & Technology Park District | Project District 6 | Maui Research & Technology Park District |
| ROADWAY | (2)2-2-24:09 por. | 0.456 | Urban | Kihei Research & Technology Park District | Project District 6 | Maui Research & Technology Park District |
| ROADWAY | (2)2-2-24:09 por. | 0.473 | Urban | Kihei Research & Technology Park District | Project District 6 | Maui Research & Technology Park District |
| ROADWAY | (2)2-2-24:09 por. | 0.449 | Urban | Kihei Research & Technology Park District | Project District 6 | Maui Research & Technology Park District |
| LOT | (2)2-2-24:14 | 58.288 | Urban | Kihei Research & Technology Park District | Project District 6 | Maui Research & Technology Park District |
| LOT | (2)2-2-24:15 | 26.694 | Urban | Kihei Research & Technology Park District | Project District 6 | Maui Research & Technology Park District |
| LOT | (2)2-2-24:16 | 90.189 | AG | AG | Project District 6 | Maui Research & Technology Park District |
| LOT | (2)2-2-24:17 | 39.018 | AG | AG | PQP | Maui Research & Technology Park District |
| ROADWAY | (2)2-2-24:18 | 7.855 | Urban | AG | AG | Maui Research & Technology Park District |
| DRAINAGEWAY | (2) 2-2-24:32 | 0.167 | Urban | Kihei Research & Technology Park District | Project District 6 | Maui Research & Technology Park District |
| LOT | (2)2-2-24:34 | 2.8 | Urban | Kihei Research & Technology Park District | Project District 6 | Maui Research & Technology Park District |
| BASIN | (2) 2-2-24:36 | 5.791 | Urban | Kihei Research & Technology Park District | Project District 6 | Maui Research & Technology Park District |
| LOT | (2) 2-2-24:37 | 2.338 | Urban | Kihei Research & Technology Park District | Project District 6 | Maui Research & Technology Park District |
| LOT | (2)2-2-24:38 | 2.304 | Urban | Kihei Research & Technology Park District | Project District 6 | Maui Research & Technology Park District |
| LOT | (2)2-2-24:39 | 2.297 | Urban | Kihei Research & Technology Park District | Project District 6 | Maui Research & Technology Park District |
| LOT | (2)2-2-24:40 | 2.293 | Urban | Kihei Research & Technology Park District | Project District 6 | Maui Research & Technology Park District |
| LOT | (2)2-2-24:41 | 3.027 | Urban | Kihei Research & Technology Park District | Project District 6 | Maui Research & Technology Park District |
| LOT | (2)2-2-24:42 | 2.900 | Urban | Kihei Research & Technology Park District | Project District 6 | Maui Research & Technology Park District |
| LOT | (2)2-2-24:43 | 2.041 | Urban | Kihei Research & Technology Park District | Project District 6 | Maui Research & Technology Park District |
| LOT | (2)2-2-24:44 | 2.101 | Urban | Kihei Research & Technology Park District | Project District 6 | Maui Research & Technology Park District |
| ROADWAY | (2)2-2-24:45 | 1.772 | Urban | Kihei Research & Technology Park District | Project District 6 | Maui Research & Technology Park District |
| ROADWAY | (2)2-2-24:45 por. | 0.479 | Urban | Kihei Research & Technology Park District | Project District 6 | Maui Research & Technology Park District |
| ROADWAY | (2)2-2-24:45 por. | 1.204 | Urban | Kihei Research & Technology Park District | Project District 6 | Maui Research & Technology Park District |
| ROADWAY | (2)2-2-24:46 | 0.730 | Urban | Kihei Research & Technology Park District | Project District 6 | Maui Research & Technology Park District |

282.166

NOTICE OF APPLICATION

Date: June 15, 2012

TO: **OWNERS/LESSEES**

Please be advised that the undersigned has filed an application for a Community Plan Amendment with the County of Maui, Department of Planning to change the Community Plan land use designation(s) for the following parcel(s):

- 1. Tax Map Key Number: (2) 2-2-002:054 portion (see attached location map)
- 2. Location (street address): Access is provided via Lipoa Parkway mauka of Piilani Highway in Kihei
- 3. Existing Land Use Designations:
 - State Land Use District: Agricultural
 - Community Plan: Project District 6
 - County Zoning: Agricultural
 - Other: _____
- 4. Proposed Community Plan Designation: Maui Research and Technology Park District
- 5. Description of the existing uses on the Property: Ranch land, East of the existing Maui Research and Technology Park
- 6. Description of the proposed uses on the Property: Expansion of the existing MRTP with residential, commercial and knowledge based industries pursuant to an update of the Master Plan as described in this report.

The Applicant is responsible for ensuring accuracy of the information.

Haleakala Ranch
 Owner/Applicant
 Signature: J. Scott Meadows, VP/GM
529 Kealahoa Avenue
 Mailing Address, No. & Street or PO Box
Makawao HI 96768
 City, State, Zip Code
808-572-1500
 Telephone

Maui R&T Partners LLC (Mr. Michael Rosenfeld)
 Applicant (if not also Owner) a Delaware limited liability company
 By: Maui Tech Associates, LLC a Delaware limited liability company its Administrative Member
 Signature: Michael Rosenfeld, its Manager
1999 Avenue of the Stars Suite 2850
 Mailing Address, No. & Street or PO Box
Los Angeles CA 90067
 City, State, Zip Code
310-824-2200
 Telephone

Parcels subject to CPA Owned by Haleakala Ranch

| <u>TMK</u> | <u>Acreage</u> | <u>STATE</u> | <u>EXISTING ZONING</u> | <u>EXISTING COMMUNITY PLAN</u> | <u>PROPOSED COMMUNITY PLAN</u> |
|---------------------|----------------|--------------|------------------------|--------------------------------|--|
| (2)2-2-02: 54 (por) | 123.843 | AG | AG | Project District 6 | Maui Research & Technology Park District |

Maalaea Bay

Kalaepohaku

Kihei

Project Site

© 2012 Google
Image © 2012 DigitalGlobe
Image © 2012 GeoEye
Data SOEST/UHM

Location Map

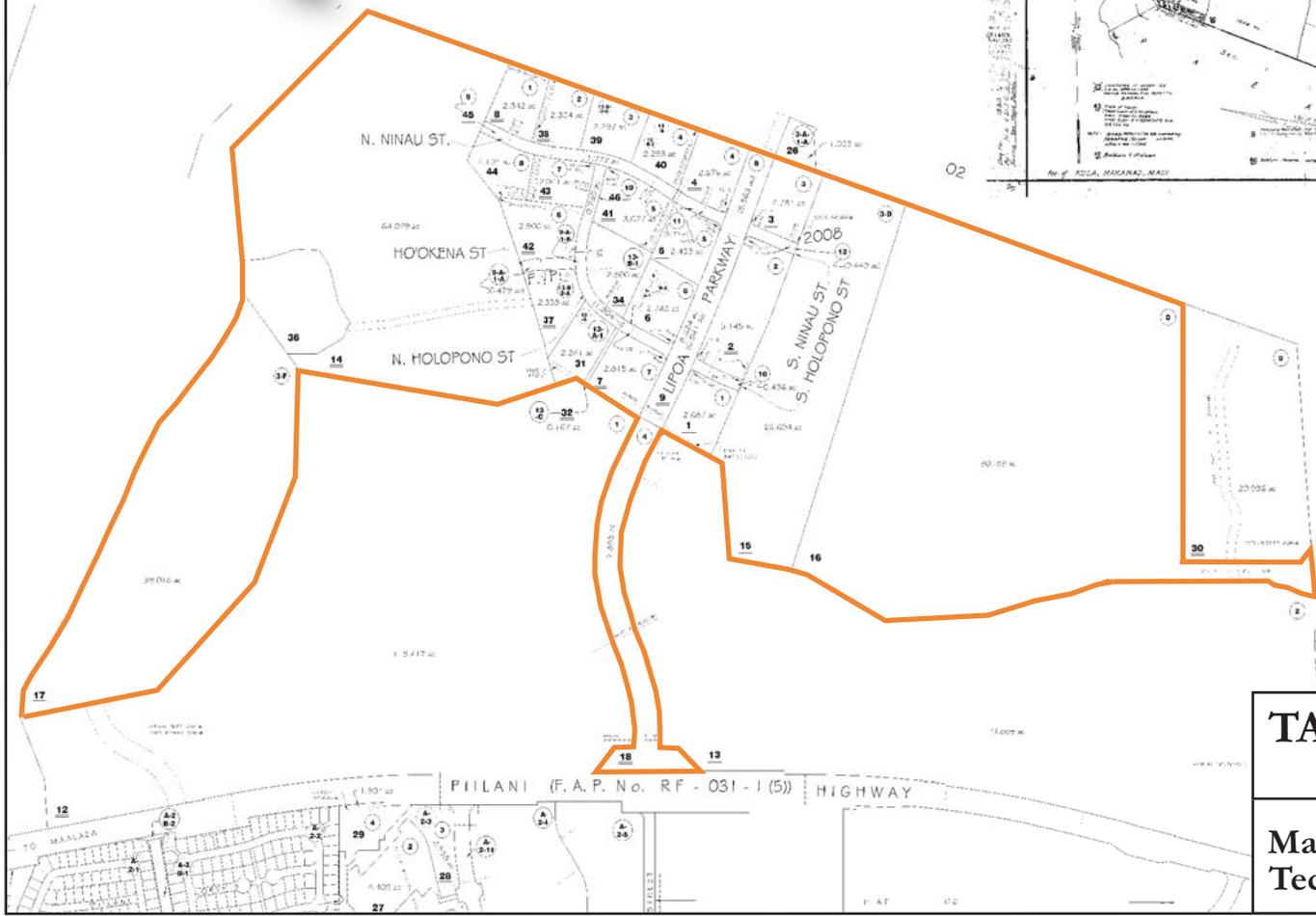
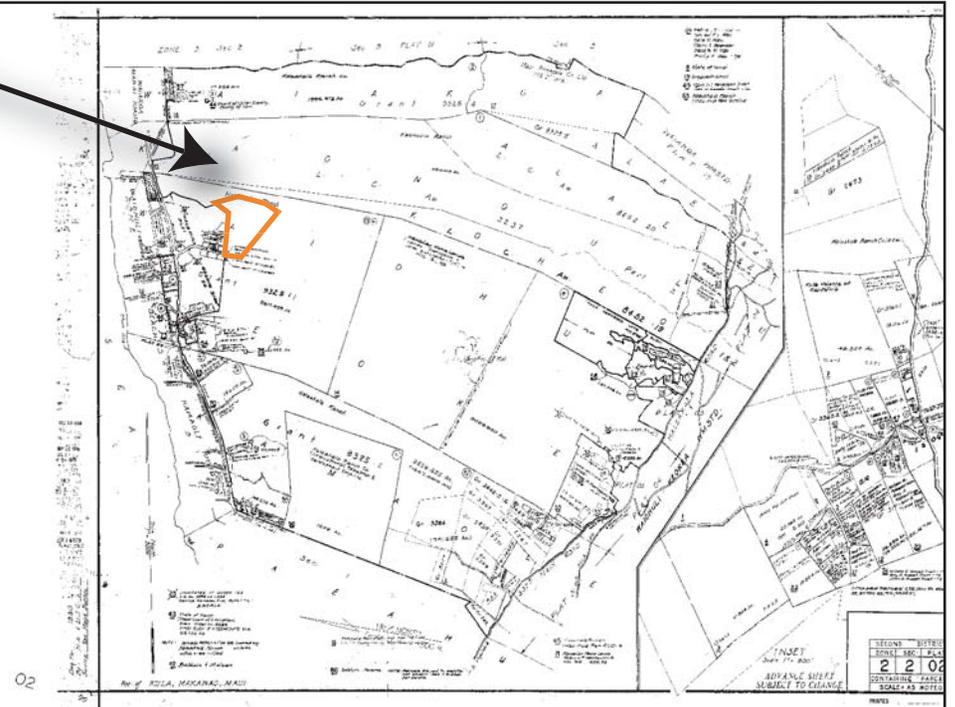
Maui Research &
Technology Park



Project Site

Parcel 54 (por.)

Parcels 1 - 9, 14 - 18, 31, 32, 34-46



TAX MAP KEY

Not to Scale

Maui Research & Technology Park



Chapter 1(f)
*Notarized Affidavit of
Mailing of Notice of
Application*

NOTARIZED AFFIDAVITS
SUBMITTED UNDER
SEPARATE COVER

Chapter 1(g)
*Notice of Public
Hearing and Location
Map*

**NOTICE OF PUBLIC HEARING FORM
TO BE SUBMITTED AT THE TIME
OF SCHEDULING BY PLANNING DEPARTMENT**

Chapter 1(h)
*Long Range Division –
Project Data Summary
Sheet*

LONG RANGE DIVISION – PROJECT DATABASE

PROPOSED PROJECT DATA SUMMARY SHEET

Applicant: Please complete this two (2) sided form. Complete only those items that are appropriate to your application(s). If you have any questions, please contact the **Long Range Planning Division** at 270-7214.

| | |
|---|--|
| Date: June 17, 2012 | Project Name (if applicable): Maui Research and Technology Park Park Master Plan Update |
| Applicant's Name: Maui R&T Partners, LLC. | What permits are you applying for? EIS, DBA, CPA, CIZ |
| Property Tax Map Key (TMK) number: See attached list | Please give us a brief summary of your project, including the existing and proposed uses: Master Plan Update of the existing R & T Park proposes housing, open space, commercial and retail uses. |
| Contact Phone Number: (808) 270-5944 | |
| E-mail Address: stevep@pacificrimland.com | Developer Name: Maui R&T Partners, LLC. Property Owner Name: Multiple property owners |

Residential Projects: Single-Family and Multi-Family

1. How many single family units (i.e., individual detached homes) are you building? 750
 a. Will accessory dwellings (i.e., ohanas) be permitted? If yes, how many? unknown at this time
2. How many multi-family units (i.e., condo, apartment, or townhouse) are you building? 500
3. Are you subdividing your property? Yes No
 a. If yes, how many buildable lots are you requesting to create? unknown at this time
4. How many acres, or square feet, are at the project site? 410.937 acres
5. If only a portion of the property is going to be used for this project, how many acres or square feet will be used just for the project area? _____
6. Will this project require land use amendments? Please check all that apply and indicate the proposed change:
 - a. Change in Zoning (CIZ) from: Yes No Not Sure Please see attached list to: _____
 - b. Community Plan Amendment from: Yes No Not Sure Please see attached list to: _____
 - c. State Land Use District Boundary Amendment (DBA) from: Yes No Not Sure Please see attached list to: _____
7. Will you be selling any of the units as "affordable" as defined under the Housing and Urban Development guidelines? Yes No Not Sure
 a. If yes, how many of the units, or percentage of units, will fall under this category? _____
8. From the date of filing the application with the Planning Department, how long do you estimate the project to reach complete build-out? Please check one (1) box.

| | |
|--|---|
| <input type="checkbox"/> 0 - 5 years | <input type="checkbox"/> 6 - 10 years |
| <input type="checkbox"/> 11 - 15 years | <input checked="" type="checkbox"/> 16 - 20 years |
| <input type="checkbox"/> 21+ years | |

Industrial/Commercial Projects

1. Will this project be used for (please list all that apply by indicating the amount of square footage proposed):
 - a. Retail purposes: 100,000 SF
 - b. Office space/lease: 1.1 - 1.5 million SF of Commercial and Industrial Use
 - c. Industrial purposes: _____

continued on next page...

LONG RANGE DIVISION – PROJECT DATABASE

...continued from previous page.

| PROPOSED PROJECT DATA SUMMARY SHEET | |
|---|---|
| Visitor Accommodations | |
| Hotels and Timeshares | |
| 1. Will this project have hotel units? | <u><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</u> |
| a. If yes, how many hotel units/rooms are proposed? | 150 units were estimated |
| 2. Will this project have timeshare units? | <u><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</u> |
| a. If yes, how many timeshare units/rooms are proposed? | _____ |
| 3. Will there be "lock-off" units (i.e., a unit which can be partitioned to create two separate units)? | <u><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</u> |
| a. If yes, how many units will have "lock-off units"? | _____ |
| Bed and Breakfast (B&B) and Transient Vacation Rentals (TVRs) | |
| 1. Will (any of) the unit(s) be owner occupied? | Not Applicable <u><input type="checkbox"/> Yes <input type="checkbox"/> No</u> |
| 2. How many bedrooms are proposed for rental? | <u><input type="checkbox"/> Yes <input type="checkbox"/> No</u> |
| <input type="checkbox"/> one (1) bedroom <input type="checkbox"/> two (2) bedrooms <input type="checkbox"/> three (3) bedrooms | |
| <input type="checkbox"/> four (4) bedrooms <input type="checkbox"/> 5+ bedrooms <input type="checkbox"/> entire unit (i.e., condo/house/accessory dwelling) | |
| 3. Will this project be newly constructed? | <u><input type="checkbox"/> Yes <input type="checkbox"/> No</u> |

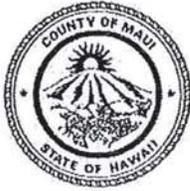
| | | |
|------|---------------------|---|
| This | Reset Button | completely erases form content. Save your work first! |
|------|---------------------|---|

Chapter 1(i)
*Mylar Map and Metes
& Bounds Description*

MYLAR MAP AND LEGAL DESCRIPTION
SUBMITTED UNDER SEPARATE COVER

Chapter 2
CHANGE IN
ZONING FORMS

Chapter 2(a)
Application Form



COUNTY OF MAUI
DEPARTMENT OF PLANNING
250 SOUTH HIGH STREET
WAILUKU, MAUI, HAWAII 96793
TELEPHONE: (808) 270-7735 FAX: (808) 270-7634

APPLICATION TYPE: CHANGE IN ZONING APPLICATION

DATE: June 7, 2012 VALUATION: \$ 1.39 Billion dollars

PROJECT NAME: Maui Research and Technology Park (MRTP) Master Plan Update

PROPOSED DEVELOPMENT: Expansion of the existing MRTP with residential, commercial and knowledge based industries pursuant to an update of the Master Plan as described in this report.

TAX MAP KEY NO.: See attached list CPR/HPR NO.: LOT SIZE: 282.166 acres

PROPERTY ADDRESS: Lipoa Parkway, mauka of Piilani Highway

OWNER: Maui R&T Partners, LLC. PHONE: (B) 310-824-2200 (H)

ADDRESS: 1999 Avenue of the Stars, Suite 2850

CITY: Los Angeles STATE: CA ZIP CODE: 90067

OWNER SIGNATURE: Maui R&T Partners, LLC a Delaware limited liability company
By: Maui Tech Associates, LLC a Delaware limited liability company
Its Administrative Member

APPLICANT: Maui R&T Partners, LLC. (Mr. Michael Rosenfeld) Michael Rosenfeld, Its Manager

ADDRESS: 1999 Avenue of the Stars, Suite 2850

CITY: Los Angeles STATE: CA ZIP CODE: 90067

PHONE (B): 310-824-2200 (H): FAX:

APPLICANT SIGNATURE: Maui R&T Partners, LLC a Delaware limited liability company
By: Maui Tech Associates, LLC a Delaware limited liability company
Its Administrative Member

AGENT NAME: Chris Hart and Partners, Inc. (Contact: Mr. Michael Summers) Michael Rosenfeld
Its Manager

ADDRESS: 115 N. Market St.

CITY: Wailuku STATE: HI ZIP CODE: 96793

PHONE (B): 808-242-1955 (H): FAX: 808-242-1956

EXISTING USE OF PROPERTY: Maui Research and Technology Park

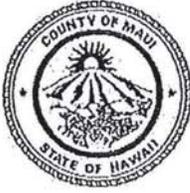
CURRENT STATE LAND USE DISTRICT BOUNDARY DESIGNATION: See attached list

COMMUNITY PLAN DESIGNATION: See attached list ZONING DESIGNATION: See attached list

OTHER SPECIAL DESIGNATIONS:

Parcels subject to CIZ Owned by Maui R&T Partners, LLC. and others

| Parcel Type | TMK | Acreage | STATE | EXISTING COMMUNITY PLAN | EXISTING ZONING | PROPOSED ZONING |
|--------------------|-------------------|----------------|--------------|--------------------------------|---|--|
| LOT | (2)2-2-24:02 | 5.145 | Urban | Project District 6 | Kihei Research & Technology Park District | Maui Research & Technology Park District |
| LOT | (2)2-2-24:03 | 2.781 | Urban | Project District 6 | Kihei Research & Technology Park District | Maui Research & Technology Park District |
| LOT | (2)2-2-24:04 | 2.676 | Urban | Project District 6 | Kihei Research & Technology Park District | Maui Research & Technology Park District |
| LOT | (2)2-2-24:05 | 2.435 | Urban | Project District 6 | Kihei Research & Technology Park District | Maui Research & Technology Park District |
| LOT | (2)2-2-24:06 | 2.743 | Urban | Project District 6 | Kihei Research & Technology Park District | Maui Research & Technology Park District |
| LOT | (2)2-2-24:07 | 2.815 | Urban | Project District 6 | Kihei Research & Technology Park District | Maui Research & Technology Park District |
| LOT | (2)2-2-24:08 | 2.342 | Urban | Project District 6 | Kihei Research & Technology Park District | Maui Research & Technology Park District |
| ROADWAY | (2)2-2-24:09 | 5.563 | Urban | Project District 6 | Kihei Research & Technology Park District | Maui Research & Technology Park District |
| ROADWAY | (2)2-2-24:09 por. | 0.456 | Urban | Project District 6 | Kihei Research & Technology Park District | Maui Research & Technology Park District |
| ROADWAY | (2)2-2-24:09 por. | 0.473 | Urban | Project District 6 | Kihei Research & Technology Park District | Maui Research & Technology Park District |
| ROADWAY | (2)2-2-24:09 por. | 0.449 | Urban | Project District 6 | Kihei Research & Technology Park District | Maui Research & Technology Park District |
| LOT | (2)2-2-24:14 | 58.288 | Urban | Project District 6 | Kihei Research & Technology Park District | Maui Research & Technology Park District |
| LOT | (2)2-2-24:15 | 26.694 | Urban | Project District 6 | Kihei Research & Technology Park District | Maui Research & Technology Park District |
| LOT | (2)2-2-24:16 | 90.189 | AG | Project District 6 | AG | Maui Research & Technology Park District |
| LOT | (2)2-2-24:17 | 39.018 | AG | PQP | AG | Maui Research & Technology Park District |
| ROADWAY | (2)2-2-24:18 | 7.855 | Urban | AG | AG | Maui Research & Technology Park District |
| DRAINAGEWAY | (2) 2-2-24:32 | 0.167 | Urban | Project District 6 | Kihei Research & Technology Park District | Maui Research & Technology Park District |
| LOT | (2)2-2-24:34 | 2.8 | Urban | Project District 6 | Kihei Research & Technology Park District | Maui Research & Technology Park District |
| BASIN | (2) 2-2-24:36 | 5.791 | Urban | Project District 6 | Kihei Research & Technology Park District | Maui Research & Technology Park District |
| LOT | (2) 2-2-24:37 | 2.338 | Urban | Project District 6 | Kihei Research & Technology Park District | Maui Research & Technology Park District |
| LOT | (2)2-2-24:38 | 2.304 | Urban | Project District 6 | Kihei Research & Technology Park District | Maui Research & Technology Park District |
| LOT | (2)2-2-24:39 | 2.297 | Urban | Project District 6 | Kihei Research & Technology Park District | Maui Research & Technology Park District |
| LOT | (2)2-2-24:40 | 2.293 | Urban | Project District 6 | Kihei Research & Technology Park District | Maui Research & Technology Park District |
| LOT | (2)2-2-24:41 | 3.027 | Urban | Project District 6 | Kihei Research & Technology Park District | Maui Research & Technology Park District |
| LOT | (2)2-2-24:42 | 2.900 | Urban | Project District 6 | Kihei Research & Technology Park District | Maui Research & Technology Park District |
| LOT | (2)2-2-24:43 | 2.041 | Urban | Project District 6 | Kihei Research & Technology Park District | Maui Research & Technology Park District |
| LOT | (2)2-2-24:44 | 2.101 | Urban | Project District 6 | Kihei Research & Technology Park District | Maui Research & Technology Park District |
| ROADWAY | (2)2-2-24:45 | 1.772 | Urban | Project District 6 | Kihei Research & Technology Park District | Maui Research & Technology Park District |
| ROADWAY | (2)2-2-24:45 por. | 0.479 | Urban | Project District 6 | Kihei Research & Technology Park District | Maui Research & Technology Park District |
| ROADWAY | (2)2-2-24:45 por. | 1.204 | Urban | Project District 6 | Kihei Research & Technology Park District | Maui Research & Technology Park District |
| ROADWAY | (2)2-2-24:46 | 0.730 | Urban | Project District 6 | Kihei Research & Technology Park District | Maui Research & Technology Park District |



COUNTY OF MAUI
DEPARTMENT OF PLANNING
250 SOUTH HIGH STREET
WAILUKU, MAUI, HAWAII 96793
TELEPHONE: (808) 270-7735 FAX: (808) 270-7634

APPLICATION TYPE: CHANGE IN ZONING APPLICATION

DATE: June 7, 2012 VALUATION: \$ 1.39 Billion dollars

PROJECT NAME: Maui Research and Technology Park (MRTP) Master Plan Update

PROPOSED DEVELOPMENT: Expansion of the existing MRTP with residential, commercial and knowledge based industries pursuant to an update of the Master Plan as described in this report.

TAX MAP KEY NO.: (2) 2-2-002:054 (por.) CPR/HPR NO.: LOT SIZE: 123.843 acres

PROPERTY ADDRESS: Lipoa Parkway, mauka of Piilani Highway

OWNER: Haleakala Ranch PHONE:(B) 808-572-1500 (H)

ADDRESS: 529 Kealaloa Avenue

CITY: Makawao STATE: HI ZIP CODE: 96768

OWNER SIGNATURE: *[Signature]*

APPLICANT: Maui R&T Partners, LLC. (Mr. Michael Rosenfeld)

ADDRESS: 1999 Avenue of the Stars, Suite 2850

CITY: Los Angeles STATE: CA ZIP CODE: 90067

PHONE (B): 310-824-2200 (H): FAX:

APPLICANT SIGNATURE: *[Signature]*
By: Maui R&T Partners a Delaware limited liability company.
Maui Tech Associates, LLC a Delaware limited liability company
Its Administrative Member

AGENT NAME: Chris Hart and Partners, Inc. (Contact: Mr. Michael Summers) Michael Rosenfeld, Its Manager

ADDRESS: 115 N. Market St.

CITY: Wailuku STATE: HI ZIP CODE: 96793

PHONE (B): 808-242-1955 (H): FAX: 808-242-1956

EXISTING USE OF PROPERTY: Maui Research and Technology Park

CURRENT STATE LAND USE DISTRICT BOUNDARY DESIGNATION: Agricultural

COMMUNITY PLAN DESIGNATION: PD 6 ZONING DESIGNATION: Agricultural

OTHER SPECIAL DESIGNATIONS:

Parcels subject to CIZ Owned by Haleakala Ranch

| <u>TMK</u> | <u>Acreage</u> | <u>STATE</u> | <u>COMMUNITY PLAN</u> | <u>EXISTING ZONING</u> | <u>PROPOSED ZONING</u> |
|---------------------|----------------|--------------|-----------------------|------------------------|--|
| (2)2-2-02: 54 (por) | 123.843 | AG | Project District 6 | AG | Maui Research & Technology Park District |

Chapter 2(b)
*Zoning and Flood
Confirmation Form*

DEC 15 2011

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COUNTY OF MAUI
DEPARTMENT OF PLANNING
Kalana Pakui Building
250 South High Street
Wailuku, Hawaii 96793



Zoning Administration and
Enforcement Division (ZAED)
Telephone: (808) 270-7253
Facsimile: (808) 270-7634
E-mail: planning@mauicounty.gov

ZONING AND FLOOD CONFIRMATION FORM

(This section to be completed by the Applicant)

APPLICANT NAME Maui R&T Partners, LLC. (Brett Davis, Planner) TELEPHONE 808-270-1561

PROJECT NAME Maui Research and Technology Park E-MAIL bdavis@chpmaui.com

PROPERTY ADDRESS Lipoa Parkway mauka of Piilani Highway, Kihei, Maui, HI TAX MAP KEY (2) 2-2-024:002

Yes No Will this Zoning & Flood Confirmation Form be used with a Subdivision Application?
If "Yes", answer questions A and B below:

A) Will it be processed under one of the consistency exemptions of Section 18.04.030(B), MCC? Yes No
If "Yes", which exemption? _____

B) Provide the purpose of subdivision and the proposed land uses below:

- NOTE: 1) Use a separate Zoning & Flood Confirmation Form for each Tax Map Key (TMK) number.
2) If this will be used with a subdivision application AND if the zoning information for the subject property contains multiple State Land Use Districts, Community Plan Designations, or County Zoning, a signed and dated Land Use Designations (LUD) Map, prepared by a licensed surveyor showing all the various districts, designations, zonings, and any subdistricts, shall be submitted for review and approval.
3) If this will be used with a subdivision application AND if there are multiple State Land Use District designations, the applicant shall procure a District Boundary Interpretation from the State Land Use Commission.

(This section to be completed by ZAED)

LAND USE DESIGNATIONS (LUD) AND OTHER ZONING INFORMATION:

STATE LAND USE DISTRICT(S) Urban

COMMUNITY PLAN DESIGNATION(S) PD-6 Project District to R&T Park

COUNTY ZONING(S) R&T Kihei - Kihei Research & Technology Park

OTHER DESIGNATION(S)/COMMENTS

Yes No
See Additional Comments On Page Two

Yes No
See The Attached Land Use Designation Map

Yes No
(SMA) SPECIAL
MANAGEMENT
AREA

Yes No
(PH) PLANNED
DEVELOPMENT

Yes No
(PD) PROJECT
DISTRICT

FLOOD INFORMATION:

FLOOD HAZARD AREA ZONE(S) X For Flood Zone AO, FLOOD DEPTH _____

BASE FLOOD ELEVATION(S) N/A feet mean sea level, Local Tidal Datum.

*FLOODWAY Yes No *FLOOD DEVELOPMENT PERMIT REQUIRED Yes No

* For flood hazard area zones X or XS, a flood development permit would be required if any work is done in any drainage facility or stream area that would reduce the capacity of the drainage facility, river, or stream, or adversely affect downstream property.

* For subdivisions in ALL FLOOD HAZARD AREA ZONES (including zones X or XS) that involve streams, gulches, low areas, or any type of drainageway, a designation of the 100 year flood inundation limits or a drainage reserve may be required.

SUBDIVISION CONSISTENCY: N/A (Not Applicable)

**The Land Use Designations (LUD) align and a unilateral agreement is not required.

**The LUD's do not align and the available or proposed land uses appear to be:

Consistent, with a Department of Public Works / Planning unilateral agreement.

Not Consistent. Comments: _____

(Signature)
Except as permitted in Section 18.04.030(B) MCC, property containing Interim Zoning shall NOT be subdivided.

** All proposed subdivisions will be further reviewed during the subdivision application process to verify consistency, unilateral agreement requirements, and the conditions associated with a unilateral agreement [Section 18.04.030(D), Maui County Code].

REVIEWED & CONFIRMED BY:

[Signature]
(Signature)

12/16/11
(Date)

For: AARON SHINMOTO, Planning Program Administrator, Zoning Administration and Enforcement Division

DEC 15 2011

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COUNTY OF MAUI
DEPARTMENT OF PLANNING
Kalana Pakui Building
250 South High Street
Wailuku, Hawaii 96793



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Telephone: (808) 270-7253
Facsimile: (808) 270-7634
E-mail: planning@mauicounty.gov

ZONING AND FLOOD CONFIRMATION FORM

(This section to be completed by the Applicant)

APPLICANT NAME Maui R&T Partners, LLC. (Brett Davis, Planner) TELEPHONE 808-270-1561
PROJECT NAME Maui Research and Technology Park E-MAIL bdavis@chpmaui.com
PROPERTY ADDRESS Lipoa Parkway mauka of Pilihi Highway, Kihei, Maui, HI TAX MAP KEY (2) 2-2-024:003

Yes No Will this Zoning & Flood Confirmation Form be used with a Subdivision Application?
If "Yes", answer questions A and B below:

A) Will it be processed under one of the consistency exemptions of Section 18.04.030(B), MCC? Yes No
If "Yes", which exemption? _____

B) Provide the purpose of subdivision and the proposed land uses below: _____

- NOTE: 1) Use a separate Zoning & Flood Confirmation Form for each Tax Map Key (TMK) number.
2) If this will be used with a subdivision application AND if the zoning information for the subject property contains multiple State Land Use Districts, Community Plan Designations, or County Zoning, a signed and dated Land Use Designations (LUD) Map, prepared by a licensed surveyor showing all the various districts, designations, zonings, and any subdistricts, shall be submitted for review and approval.
3) If this will be used with a subdivision application AND if there are multiple State Land Use District designations, the applicant shall procure a District Boundary Interpretation from the State Land Use Commission.

(This section to be completed by ZAED)

LAND USE DESIGNATIONS (LUD) AND OTHER ZONING INFORMATION:
STATE LAND USE DISTRICT(S) Urban
COMMUNITY PLAN DESIGNATION(S) PDC - Project District G R&T Park
COUNTY ZONING(S) R&T Kihei - Kihei Research Technology Park
OTHER DESIGNATION(S)/COMMENTS _____

Yes No
(SMA) SPECIAL MANAGEMENT AREA

Yes No
(PH) PLANNED DEVELOPMENT

Yes No
(PD) PROJECT DISTRICT

Yes No See Additional Comments On Page Two

Yes No See The Attached Land Use Designation Map

FLOOD INFORMATION:
FLOOD HAZARD AREA ZONE(S) X For Flood Zone AO, FLOOD DEPTH _____
BASE FLOOD ELEVATION(S) N/A feet mean sea level, Local Tidal Datum.
*FLOODWAY Yes No *FLOOD DEVELOPMENT PERMIT REQUIRED Yes No

* For flood hazard area zones X or XS, a flood development permit would be required if any work is done in any drainage facility or stream area that would reduce the capacity of the drainage facility, river, or stream, or adversely affect downstream property.
* For subdivisions in ALL FLOOD HAZARD AREA ZONES (including zones X or XS) that involve streams, gulches, low areas, or any type of drainage, a designation of the 100 year flood inundation limits or a drainage reserve may be required.

SUBDIVISION CONSISTENCY: N/A (Not Applicable)

**The Land Use Designations (LUD) align and a unilateral agreement is not required.
 **The LUD's do not align and the available or proposed land uses appear to be:
 Consistent, with a Department of Public Works / Planning unilateral agreement.
 Not Consistent. Comments: _____

(Signature)
Except as permitted in Section 18.04.030(B) MCC, property containing Interim Zoning shall NOT be subdivided.

** All proposed subdivisions will be further reviewed during the subdivision application process to verify consistency, unilateral agreement requirements, and the conditions associated with a unilateral agreement [Section 18.04.030(D), Maui County Code].

REVIEWED & CONFIRMED BY: *Aaron Shinmoto* 12/16/11
(Signature) (Date)

For: AARON SHINMOTO, Planning Program Administrator, Zoning Administration and Enforcement Division

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ZONING AND FLOOD CONFIRMATION FORM

(This section to be completed by the Applicant)

APPLICANT NAME Maui R&T Partners, LLC. (Brett Davis, Planner) TELEPHONE 808-270-1561

PROJECT NAME Maui Research and Technology Park E-MAIL bdavis@chpmaui.com

PROPERTY ADDRESS Lipoa Parkway mauka of Pillani Highway, Kihel, Maui, HI TAX MAP KEY (2) 2-2-024:004

Yes No Will this Zoning & Flood Confirmation Form be used with a Subdivision Application?
If "Yes", answer questions A and B below:

A) Will it be processed under one of the consistency exemptions of Section 18.04.030(B), MCC? Yes No

If "Yes", which exemption? _____

B) Provide the purpose of subdivision and the proposed land uses below: _____

- NOTE: 1) Use a separate Zoning & Flood Confirmation Form for each Tax Map Key (TMK) number.
 2) If this will be used with a subdivision application AND if the zoning information for the subject property contains multiple State Land Use Districts, Community Plan Designations, or County Zoning, a signed and dated Land Use Designations (LUD) Map, prepared by a licensed surveyor showing all the various districts, designations, zonings, and any subdistricts, shall be submitted for review and approval.
 3) If this will be used with a subdivision application AND if there are multiple State Land Use District designations, the applicant shall procure a District Boundary Interpretation from the State Land Use Commission.

(This section to be completed by ZAED)

LAND USE DESIGNATIONS (LUD) AND OTHER ZONING INFORMATION:

STATE LAND USE DISTRICT(S) Urban

COMMUNITY PLAN DESIGNATION(S) PD6 - Project District 6 R&T Park

COUNTY ZONING(S) R&T Kihel - Kihel Research & Technology Park

OTHER DESIGNATION(S)/COMMENTS _____

Yes No
See Additional Comments On Page Two

Yes No
See The Attached Land Use Designation Map

Yes No
(SMA) SPECIAL
MANAGEMENT
AREA

Yes No
(PH) PLANNED
DEVELOPMENT

Yes No
(PD) PROJECT
DISTRICT

FLOOD INFORMATION:

FLOOD HAZARD AREA ZONE(S) X For Flood Zone AO, FLOOD DEPTH _____

BASE FLOOD ELEVATION(S) N/A feet mean sea level, Local Tidal Datum.

*FLOODWAY Yes No *FLOOD DEVELOPMENT PERMIT REQUIRED Yes No

* For flood hazard area zones X or XS, a flood development permit would be required if any work is done in any drainage facility or stream area that would reduce the capacity of the drainage facility, river, or stream, or adversely affect downstream property.

* For subdivisions in ALL FLOOD HAZARD AREA ZONES (including zones X or XS) that involve streams, gulches, low areas, or any type of drainage, a designation of the 100 year flood inundation limits or a drainage reserve may be required.

SUBDIVISION CONSISTENCY: N/A (Not Applicable)

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** The LUD's do not align and the available or proposed land uses appear to be:

Consistent, with a Department of Public Works / Planning unilateral agreement.

Not Consistent. Comments: _____

(Signature)
Except as permitted in Section 18.04.030(B) MCC, property containing Interim Zoning shall NOT be subdivided.

** All proposed subdivisions will be further reviewed during the subdivision application process to verify consistency, unilateral agreement requirements, and the conditions associated with a unilateral agreement [Section 18.04.030(D), Maui County Code].

REVIEWED & CONFIRMED BY:

Aaron Shinmoto

12/16/11

For: AARON SHINMOTO, Planning Program Administrator, Zoning Administration and Enforcement Division

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DEPARTMENT OF PLANNING
Kalana Pakui Building
250 South High Street
Wailuku, Hawaii 96793



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Facsimile: (808) 270-7634
E-mail: planning@mauicounty.gov

ZONING AND FLOOD CONFIRMATION FORM

(This section to be completed by the Applicant)

APPLICANT NAME Maui R&T Partners, LLC. (Brett Davis, Planner) TELEPHONE 808-270-1561
PROJECT NAME Maui Research and Technology Park E-MAIL bdavis@chpmaui.com
PROPERTY ADDRESS Lipoa Parkway mauka of Piilani Highway, Kihel, Maui, HI TAX MAP KEY (2) 2-2-024:005

Yes No Will this Zoning & Flood Confirmation Form be used with a Subdivision Application?
If "Yes", answer questions A and B below:

A) Will it be processed under one of the consistency exemptions of Section 18.04.030(B), MCC? Yes No
If "Yes", which exemption? _____

B) Provide the purpose of subdivision and the proposed land uses below: _____

- NOTE: 1) Use a separate Zoning & Flood Confirmation Form for each Tax Map Key (TMK) number.
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(This section to be completed by ZAED)

LAND USE DESIGNATIONS (LUD) AND OTHER ZONING INFORMATION:

STATE LAND USE DISTRICT(S) Urban
COMMUNITY PLAN DESIGNATION(S) PD-6 Project District 6 R&T Park
COUNTY ZONING(S) R&T Kihel - Kihel Research Technology park
OTHER DESIGNATION(S)/COMMENTS _____

Yes No
(SMA) SPECIAL MANAGEMENT AREA

Yes No
(PH) PLANNED DEVELOPMENT

Yes No
(PD) PROJECT DISTRICT

Yes No See Additional Comments On Page Two

Yes No See The Attached Land Use Designation Map

FLOOD INFORMATION:

FLOOD HAZARD AREA ZONE(S) X For Flood Zone AO, FLOOD DEPTH _____
BASE FLOOD ELEVATION(S) N/A feet mean sea level, Local Tidal Datum.

*FLOODWAY Yes No *FLOOD DEVELOPMENT PERMIT REQUIRED Yes No
* For flood hazard area zones X or XS, a flood development permit would be required if any work is done in any drainage facility or stream area that would reduce the capacity of the drainage facility, river, or stream, or adversely affect downstream property.
* For subdivisions in ALL FLOOD HAZARD AREA ZONES (including zones X or XS) that involve streams, gulches, low areas, or any type of drainage, a designation of the 100 year flood inundation limits or a drainage reserve may be required.

SUBDIVISION CONSISTENCY: N/A (Not Applicable)
 **The Land Use Designations (LUD) align and a unilateral agreement is not required.
 **The LUD's do not align and the available or proposed land uses appear to be:
 Consistent, with a Department of Public Works / Planning unilateral agreement.
 Not Consistent. Comments: _____

(Signature)
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REVIEWED & CONFIRMED BY: [Signature] 12/16/11
(Signature) (Date)
For: AARON SHINMOTO, Planning Program Administrator, Zoning Administration and Enforcement Division

DEC 15 2011

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COUNTY OF MAUI
DEPARTMENT OF PLANNING
Kalana Pakui Building
250 South High Street
Wailuku, Hawaii 96793



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Telephone: (808) 270-7253
Facsimile: (808) 270-7634
E-mail: planning@mauicounty.gov

ZONING AND FLOOD CONFIRMATION FORM

(This section to be completed by the Applicant)

APPLICANT NAME Maui R&T Partners, LLC. (Brett Davis, Planner) TELEPHONE 808-270-1561

PROJECT NAME Maui Research and Technology Park E-MAIL bdavis@chpmaui.com

PROPERTY ADDRESS Lipoa Parkway mauka of Pillani Highway, Kihei, Maui, HI TAX MAP KEY (2) 2-2-024:006

Yes No Will this Zoning & Flood Confirmation Form be used with a Subdivision Application?
If "Yes", answer questions A and B below:

A) Will it be processed under one of the consistency exemptions of Section 18.04.030(B), MCC? Yes No
If "Yes", which exemption? _____

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(This section to be completed by ZAED)

LAND USE DESIGNATIONS (LUD) AND OTHER ZONING INFORMATION:

STATE LAND USE DISTRICT(S) urban

COMMUNITY PLAN DESIGNATION(S) PD-6 Project District 6 R&T Park

COUNTY ZONING(S) Kihei R&T - Kihei Research & Technology Park

OTHER DESIGNATION(S)/COMMENTS

Yes No
See Additional Comments On Page Two

Yes No
See The Attached Land Use Designation Map

Yes No
(SMA) SPECIAL
MANAGEMENT
AREA

Yes No
(PH) PLANNED
DEVELOPMENT

Yes No
(PD) PROJECT
DISTRICT

FLOOD INFORMATION:

FLOOD HAZARD AREA ZONE(S) X For Flood Zone AO, FLOOD DEPTH _____

BASE FLOOD ELEVATION(S) N/A feet mean sea level, Local Tidal Datum.

*FLOODWAY Yes No *FLOOD DEVELOPMENT PERMIT REQUIRED Yes No

* For flood hazard area zones X or XS, a flood development permit would be required if any work is done in any drainage facility or stream area that would reduce the capacity of the drainage facility, river, or stream, or adversely affect downstream property.

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**The LUD's do not align and the available or proposed land uses appear to be:

Consistent, with a Department of Public Works / Planning unilateral agreement.

Not Consistent. Comments: _____

(Signature)
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REVIEWED & CONFIRMED BY:

[Signature]

12/16/11

For: AARON SHINMOTO, Planning Program Administrator, Zoning Administration and Enforcement Division

DEC 15 2011

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ZONING AND FLOOD CONFIRMATION FORM

(This section to be completed by the Applicant)

APPLICANT NAME Maui R&T Partners, LLC. (Brett Davis, Planner) TELEPHONE 808-270-1561
PROJECT NAME Maui Research and Technology Park E-MAIL bdavis@chpmaui.com
PROPERTY ADDRESS Lipoa Parkway mauka of Pillani Highway, Kihei, Maui, HI TAX MAP KEY (2) 2-2-024:007

Yes No Will this Zoning & Flood Confirmation Form be used with a Subdivision Application?
If "Yes", answer questions A and B below:
A) Will it be processed under one of the consistency exemptions of Section 18.04.030(B), MCC? Yes No
If "Yes", which exemption? _____
B) Provide the purpose of subdivision and the proposed land uses below: _____

- NOTE: 1) Use a separate Zoning & Flood Confirmation Form for each Tax Map Key (TMK) number.
 2) If this will be used with a subdivision application AND if the zoning information for the subject property contains multiple State Land Use Districts, Community Plan Designations, or County Zoning, a signed and dated Land Use Designations (LUD) Map, prepared by a licensed surveyor showing all the various districts, designations, zonings, and any subdistricts, shall be submitted for review and approval.
 3) If this will be used with a subdivision application AND if there are multiple State Land Use District designations, the applicant shall procure a District Boundary Interpretation from the State Land Use Commission.

(This section to be completed by ZAED)

LAND USE DESIGNATIONS (LUD) AND OTHER ZONING INFORMATION:

STATE LAND USE DISTRICT(S) Urban
COMMUNITY PLAN DESIGNATION(S) PD 6 Project District 6 R&T Park
COUNTY ZONING(S) RAT Kihei - Kihei Research & Technology Park
OTHER DESIGNATION(S)/COMMENTS _____

Yes No
(SMA) SPECIAL MANAGEMENT AREA

Yes No
(PH) PLANNED DEVELOPMENT

Yes No
(PD) PROJECT DISTRICT

Yes No See Additional Comments On Page Two

Yes No See The Attached Land Use Designation Map

FLOOD INFORMATION:

FLOOD HAZARD AREA ZONE(S) X For Flood Zone AO, FLOOD DEPTH _____
BASE FLOOD ELEVATION(S) N/A feet mean sea level, Local Tidal Datum.

*FLOODWAY Yes No *FLOOD DEVELOPMENT PERMIT REQUIRED Yes No
* For flood hazard area zones X or XS, a flood development permit would be required if any work is done in any drainage facility or stream area that would reduce the capacity of the drainage facility, river, or stream, or adversely affect downstream property.
* For subdivisions in ALL FLOOD HAZARD AREA ZONES (including zones X or XS) that involve streams, gulches, low areas, or any type of draingeway, a designation of the 100 year flood inundation limits or a drainage reserve may be required.

SUBDIVISION CONSISTENCY:

N/A (Not Applicable)

- **The Land Use Designations (LUD) align and a unilateral agreement is not required.
 **The LUD's do not align and the available or proposed land uses appear to be:
 Consistent, with a Department of Public Works / Planning unilateral agreement.
 Not Consistent. Comments: _____

(Signature)
Except as permitted in Section 18.04.030(B) MCC, property containing Interim Zoning shall NOT be subdivided.

** All proposed subdivisions will be further reviewed during the subdivision application process to verify consistency, unilateral agreement requirements, and the conditions associated with a unilateral agreement (Section 18.04.030(D), Maui County Code).

REVIEWED & CONFIRMED BY:

[Signature] (Signature) 12/16/11 (Date)

For: AARON SHINMOTO, Planning Program Administrator, Zoning Administration and Enforcement Division

DEC 15 2011

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COUNTY OF MAUI
DEPARTMENT OF PLANNING
Kalana Pakui Building
250 South High Street
Wailuku, Hawaii 96793



Zoning Administration and
Enforcement Division (ZAED)
Telephone: (808) 270-7253
Facsimile: (808) 270-7634
E-mail: planning@mauicounty.gov

ZONING AND FLOOD CONFIRMATION FORM

(This section to be completed by the Applicant)

APPLICANT NAME Maui R&T Partners, LLC. (Brett Davis, Planner) TELEPHONE 808-270-1561

PROJECT NAME Maui Research and Technology Park E-MAIL bdavis@chpmaui.com

PROPERTY ADDRESS Lipoa Parkway mauka of Piilani Highway, Kihei, Maui, HI TAX MAP KEY (2) 2-2-024:008

Yes No Will this Zoning & Flood Confirmation Form be used with a Subdivision Application?
If "Yes", answer questions A and B below:

A) Will it be processed under one of the consistency exemptions of Section 18.04.030(B), MCC? Yes No
If "Yes", which exemption? _____

B) Provide the purpose of subdivision and the proposed land uses below: _____

- NOTE: 1) Use a separate Zoning & Flood Confirmation Form for each Tax Map Key (TMK) number.
2) If this will be used with a subdivision application AND if the zoning information for the subject property contains multiple State Land Use Districts, Community Plan Designations, or County Zoning, a signed and dated Land Use Designations (LUD) Map, prepared by a licensed surveyor showing all the various districts, designations, zonings, and any subdistricts, shall be submitted for review and approval.
3) If this will be used with a subdivision application AND if there are multiple State Land Use District designations, the applicant shall procure a District Boundary Interpretation from the State Land Use Commission.

(This section to be completed by ZAED)

LAND USE DESIGNATIONS (LUD) AND OTHER ZONING INFORMATION:

STATE LAND USE DISTRICT(S) Urban

COMMUNITY PLAN DESIGNATION(S) PD-6 Project District 6 R&T Park

COUNTY ZONING(S) R&T Kihei - Kihei Research+Technology Park

OTHER DESIGNATION(S)/COMMENTS Proposed Road

Yes No
(SMA) SPECIAL MANAGEMENT AREA

Yes No
(PH) PLANNED DEVELOPMENT

Yes No
(PD) PROJECT DISTRICT

Yes No See Additional Comments On Page Two

Yes No See The Attached Land Use Designation Map

FLOOD INFORMATION:

FLOOD HAZARD AREA ZONE(S) X For Flood Zone AO, FLOOD DEPTH _____

BASE FLOOD ELEVATION(S) N/A feet mean sea level, Local Tidal Datum.

*FLOODWAY Yes No *FLOOD DEVELOPMENT PERMIT REQUIRED Yes No

* For flood hazard area zones X or XS, a flood development permit would be required if any work is done in any drainage facility or stream area that would reduce the capacity of the drainage facility, river, or stream, or adversely affect downstream property.
* For subdivisions in ALL FLOOD HAZARD AREA ZONES (including zones X or XS) that involve streams, gulches, low areas, or any type of draingeway, a designation of the 100 year flood inundation limits or a drainage reserve may be required.

SUBDIVISION CONSISTENCY:

N/A (Not Applicable)

**The Land Use Designations (LUD) align and a unilateral agreement is not required.

**The LUD's do not align and the available or proposed land uses appear to be:

Consistent, with a Department of Public Works / Planning unilateral agreement.

Not Consistent. Comments: _____

(Signature)
Except as permitted in Section 18.04.030(B) MCC, property containing Interim Zoning shall NOT be subdivided.

** All proposed subdivisions will be further reviewed during the subdivision application process to verify consistency, unilateral agreement requirements, and the conditions associated with a unilateral agreement (Section 18.04.030(D), Maui County Code).

REVIEWED & CONFIRMED BY:

Aaron Shinmoto
(Signature)

12/16/11
(Date)

For: AARON SHINMOTO, Planning Program Administrator, Zoning Administration and Enforcement Division

DEC 15 2011

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ZONING AND FLOOD CONFIRMATION FORM

(This section to be completed by the Applicant)

APPLICANT NAME Maui R&T Partners, LLC. (Brett Davis, Planner) TELEPHONE 808-270-1561

PROJECT NAME Maui Research and Technology Park E-MAIL bdavis@chpmaui.com

PROPERTY ADDRESS Lipoa Parkway mauka of Piilani Highway, Kihei, Maui, HI TAX MAP KEY (2) 2-2-024:009

Yes No Will this Zoning & Flood Confirmation Form be used with a Subdivision Application?
If "Yes", answer questions A and B below:

A) Will it be processed under one of the consistency exemptions of Section 18.04.030(B), MCC? Yes No
If "Yes", which exemption? _____

B) Provide the purpose of subdivision and the proposed land uses below: _____

- NOTE: 1) Use a separate Zoning & Flood Confirmation Form for each Tax Map Key (TMK) number.
2) If this will be used with a subdivision application AND if the zoning information for the subject property contains multiple State Land Use Districts, Community Plan Designations, or County Zoning, a signed and dated Land Use Designations (LUD) Map, prepared by a licensed surveyor showing all the various districts, designations, zonings, and any subdistricts, shall be submitted for review and approval.
3) If this will be used with a subdivision application AND if there are multiple State Land Use District designations, the applicant shall procure a District Boundary Interpretation from the State Land Use Commission.

(This section to be completed by ZAED)

LAND USE DESIGNATIONS (LUD) AND OTHER ZONING INFORMATION:

STATE LAND USE DISTRICT(S) Urban

COMMUNITY PLAN DESIGNATION(S) PD-6 Project District 6 - R&T Park

COUNTY ZONING(S) Kihei R&T - Kihei Research + Technology Park

OTHER DESIGNATION(S)/COMMENTS Proposed Street Road

Yes No
See Additional Comments On Page Two

Yes No
See The Attached Land Use Designation Map

Yes No
(SMA) SPECIAL MANAGEMENT AREA

Yes No
(PH) PLANNED DEVELOPMENT

Yes No
(PD) PROJECT DISTRICT

FLOOD INFORMATION:

FLOOD HAZARD AREA ZONE(S) X For Flood Zone AO, FLOOD DEPTH _____

BASE FLOOD ELEVATION(S) N/A feet mean sea level, Local Tidal Datum.

*FLOODWAY Yes No *FLOOD DEVELOPMENT PERMIT REQUIRED Yes No

* For flood hazard area zones X or XS, a flood development permit would be required if any work is done in any drainage facility or stream area that would reduce the capacity of the drainage facility, river, or stream, or adversely affect downstream property.

* For subdivisions in ALL FLOOD HAZARD AREA ZONES (including zones X or XS) that involve streams, gulches, low areas, or any type of drainageway, a designation of the 100 year flood inundation limits or a drainage reserve may be required.

SUBDIVISION CONSISTENCY: N/A (Not Applicable)

**The Land Use Designations (LUD) align and a unilateral agreement is not required.

**The LUD's do not align and the available or proposed land uses appear to be:

Consistent, with a Department of Public Works / Planning unilateral agreement.

Not Consistent, Comments: _____

(Signature)
Except as permitted in Section 18.04.030(B) MCC, property containing Interim Zoning shall NOT be subdivided.

** All proposed subdivisions will be further reviewed during the subdivision application process to verify consistency, unilateral agreement requirements, and the conditions associated with a unilateral agreement [Section 18.04.030(D), Maui County Code].

REVIEWED & CONFIRMED BY:

Aaron Shinmoto
(Signature)

12/16/11
(Date)

For: AARON SHINMOTO, Planning Program Administrator, Zoning Administration and Enforcement Division

DEC 15 2011

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ZONING AND FLOOD CONFIRMATION FORM

(This section to be completed by the Applicant)

APPLICANT NAME Maui R&T Partners, LLC. (Brett Davis, Planner) TELEPHONE 808-270-1561

PROJECT NAME Maui Research and Technology Park E-MAIL bdavis@chpmaui.com

PROPERTY ADDRESS Lipoa Parkway mauka of Piilani Highway, Kihel, Maui, HI TAX MAP KEY (2) 2-2-024:014

Yes No Will this Zoning & Flood Confirmation Form be used with a Subdivision Application?
If "Yes", answer questions A and B below:

A) Will it be processed under one of the consistency exemptions of Section 18.04.030(B), MCC? Yes No
If "Yes", which exemption? _____

B) Provide the purpose of subdivision and the proposed land uses below: _____

- NOTE: 1) Use a separate Zoning & Flood Confirmation Form for each Tax Map Key (TMK) number.
2) If this will be used with a subdivision application AND if the zoning information for the subject property contains multiple State Land Use Districts, Community Plan Designations, or County Zoning, a signed and dated Land Use Designations (LUD) Map, prepared by a licensed surveyor showing all the various districts, designations, zonings, and any subdistricts, shall be submitted for review and approval.
3) If this will be used with a subdivision application AND if there are multiple State Land Use District designations, the applicant shall procure a District Boundary Interpretation from the State Land Use Commission.

(This section to be completed by ZAED)

LAND USE DESIGNATIONS (LUD) AND OTHER ZONING INFORMATION:

STATE LAND USE DISTRICT(S) Urban + Ag-Agricultural

COMMUNITY PLAN DESIGNATION(S) PD-6 Project District 6 - R&T Park

COUNTY ZONING(S) R&T Kihel Kihel Research & Technology Park

OTHER DESIGNATION(S)/COMMENTS Applicant needs to confirm with State LLC

Yes No
See Additional Comments On Page Two

Yes No
See The Attached Land Use Designation Map

Yes No
(SMA) SPECIAL MANAGEMENT AREA

Yes No
(PH) PLANNED DEVELOPMENT

Yes No
(PD) PROJECT DISTRICT

FLOOD INFORMATION:

FLOOD HAZARD AREA ZONE(S) X For Flood Zone AO, FLOOD DEPTH _____

BASE FLOOD ELEVATION(S) N/A feet mean sea level, Local Tidal Datum.

*FLOODWAY Yes No *FLOOD DEVELOPMENT PERMIT REQUIRED Yes No

* For flood hazard area zones X or XS, a flood development permit would be required if any work is done in any drainage facility or stream area that would reduce the capacity of the drainage facility, river, or stream, or adversely affect downstream property.

* For subdivisions in ALL FLOOD HAZARD AREA ZONES (including zones X or XS) that involve streams, gulches, low areas, or any type of drainage, a designation of the 100 year flood inundation limits or a drainage reserve may be required.

SUBDIVISION CONSISTENCY:

N/A (Not Applicable)

**The Land Use Designations (LUD) align and a unilateral agreement is not required.

**The LUD's do not align and the available or proposed land uses appear to be:

Consistent, with a Department of Public Works / Planning unilateral agreement.

Not Consistent. Comments: _____

(Signature)
Except as permitted in Section 18.04.030(B) MCC, property containing Interim Zoning shall NOT be subdivided.

** All proposed subdivisions will be further reviewed during the subdivision application process to verify consistency, unilateral agreement requirements, and the conditions associated with a unilateral agreement [Section 18.04.030(D), Maui County Code].

REVIEWED & CONFIRMED BY:

[Signature]

12/16/11
(Date)

For: AARON SHINMOTO, Planning Program Administrator, Zoning Administration and Enforcement Division

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ZONING AND FLOOD CONFIRMATION FORM

(This section to be completed by the Applicant)

APPLICANT NAME Maui R&T Partners, LLC. (Brett Davis, Planner) TELEPHONE 808-270-1561

PROJECT NAME Maui Research and Technology Park E-MAIL bdavis@chpmaui.com

PROPERTY ADDRESS Lipoa Parkway mauka of Pilihi Highway, Kihel, Maui, HI TAX MAP KEY (2) 2-2-024:015

Yes No Will this Zoning & Flood Confirmation Form be used with a Subdivision Application?

If "Yes", answer questions A and B below:

A) Will it be processed under one of the consistency exemptions of Section 18.04.030(B), MCC? Yes No

If "Yes", which exemption? _____

B) Provide the purpose of subdivision and the proposed land uses below:

- NOTE: 1) Use a separate Zoning & Flood Confirmation Form for each Tax Map Key (TMK) number.
 2) If this will be used with a subdivision application AND if the zoning information for the subject property contains multiple State Land Use Districts, Community Plan Designations, or County Zoning, a signed and dated Land Use Designations (LUD) Map, prepared by a licensed surveyor showing all the various districts, designations, zonings, and any subdistricts, shall be submitted for review and approval.
 3) If this will be used with a subdivision application AND if there are multiple State Land Use District designations, the applicant shall procure a District Boundary Interpretation from the State Land Use Commission.

(This section to be completed by ZAED)

LAND USE DESIGNATIONS (LUD) AND OTHER ZONING INFORMATION:

STATE LAND USE DISTRICT(S) Urban + Ag-Agricultural

COMMUNITY PLAN DESIGNATION(S) PD-6 - Project District 6 - R&T Park

COUNTY ZONING(S) R&T Kihel - Kihel Research + Technology Park

OTHER DESIGNATION(S)/COMMENTS Applicant needs to confirm with State LUD

Yes No
See Additional Comments On Page Two

Yes No
See The Attached Land Use Designation Map

Yes No
(SMA) SPECIAL
MANAGEMENT
AREA

Yes No
(PH) PLANNED
DEVELOPMENT

Yes No
(PD) PROJECT
DISTRICT

FLOOD INFORMATION:

FLOOD HAZARD AREA ZONE(S) X For Flood Zone AO, FLOOD DEPTH _____

BASE FLOOD ELEVATION(S) N/A feet mean sea level, Local Tidal Datum.

*FLOODWAY Yes No *FLOOD DEVELOPMENT PERMIT REQUIRED Yes No

* For flood hazard area zones X or XS, a flood development permit would be required if any work is done in any drainage facility or stream area that would reduce the capacity of the drainage facility, river, or stream, or adversely affect downstream property.

* For subdivisions in ALL FLOOD HAZARD AREA ZONES (including zones X or XS) that involve streams, gulches, low areas, or any type of drainageway, a designation of the 100 year flood inundation limits or a drainage reserve may be required.

SUBDIVISION CONSISTENCY:

N/A (Not Applicable)

**The Land Use Designations (LUD) align and a unilateral agreement is not required.

**The LUD's do not align and the available or proposed land uses appear to be:

Consistent, with a Department of Public Works / Planning unilateral agreement.

Not Consistent. Comments: _____

(Signature)
Except as permitted in Section 18.04.030(B) MCC, property containing Interim Zoning shall NOT be subdivided.

** All proposed subdivisions will be further reviewed during the subdivision application process to verify consistency, unilateral agreement requirements, and the conditions associated with a unilateral agreement [Section 18.04.030(D), Maui County Code].

REVIEWED & CONFIRMED BY:

Aaron Shinmoto

12/16/11

For: AARON SHINMOTO, Planning Program Administrator, Zoning Administration and Enforcement Division

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COUNTY OF MAUI
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Facsimile: (808) 270-7634
E-mail: planning@mauicounty.gov

ZONING AND FLOOD CONFIRMATION FORM

(This section to be completed by the Applicant)

APPLICANT NAME Maui R&T Partners, LLC. (Brett Davis, Planner) TELEPHONE 808-270-1561
PROJECT NAME Maui Research and Technology Park E-MAIL bdavis@chpmaui.com
PROPERTY ADDRESS Lipoa Parkway mauka of Pillani Highway, Kihei, Maui, HI TAX MAP KEY (2) 2-2-024:016

Yes No Will this Zoning & Flood Confirmation Form be used with a Subdivision Application?
If "Yes", answer questions A and B below:

A) Will it be processed under one of the consistency exemptions of Section 18.04.030(B), MCC? Yes No
If "Yes", which exemption? _____

B) Provide the purpose of subdivision and the proposed land uses below: _____

- NOTE: 1) Use a separate Zoning & Flood Confirmation Form for each Tax Map Key (TMK) number.
2) If this will be used with a subdivision application AND if the zoning information for the subject property contains multiple State Land Use Districts, Community Plan Designations, or County Zoning, a signed and dated Land Use Designations (LUD) Map, prepared by a licensed surveyor showing all the various districts, designations, zonings, and any subdistricts, shall be submitted for review and approval.
3) If this will be used with a subdivision application AND if there are multiple State Land Use District designations, the applicant shall procure a District Boundary Interpretation from the State Land Use Commission.

(This section to be completed by ZAED)

LAND USE DESIGNATIONS (LUD) AND OTHER ZONING INFORMATION:

STATE LAND USE DISTRICT(S) AG1-Agricultural + Urban (per.)
COMMUNITY PLAN DESIGNATION(S) PD-6 - Project District 6 R&T Park
COUNTY ZONING(S) AG1-Agricultural
OTHER DESIGNATION(S)/COMMENTS Applicant needs to confirm with State on Land Use District Boundary

Yes No
(SMA) SPECIAL MANAGEMENT AREA

Yes No
(PH) PLANNED DEVELOPMENT

Yes No
(PD) PROJECT DISTRICT

Yes No See Additional Comments On Page Two

Yes No See The Attached Land Use Designation Map

FLOOD INFORMATION:

FLOOD HAZARD AREA ZONE(S) X For Flood Zone AO, FLOOD DEPTH _____
BASE FLOOD ELEVATION(S) N/A feet mean sea level, Local Tidal Datum.

*FLOODWAY Yes No *FLOOD DEVELOPMENT PERMIT REQUIRED Yes No
* For flood hazard area zones X or XS, a flood development permit would be required if any work is done in any drainage facility or stream area that would reduce the capacity of the drainage facility, river, or stream, or adversely affect downstream property.
* For subdivisions in ALL FLOOD HAZARD AREA ZONES (including zones X or XS) that involve streams, gulches, low areas, or any type of drainageway, a designation of the 100 year flood inundation limits or a drainage reserve may be required.

SUBDIVISION CONSISTENCY:

N/A (Not Applicable)
 **The Land Use Designations (LUD) align and a unilateral agreement is not required.
 **The LUD's do not align and the available or proposed land uses appear to be:
 Consistent, with a Department of Public Works / Planning unilateral agreement.
 Not Consistent. Comments: _____

** All proposed subdivisions will be further reviewed during the subdivision application process to verify consistency, unilateral agreement requirements, and the conditions associated with a unilateral agreement [Section 18.04.030(D), Maui County Code].

REVIEWED & CONFIRMED BY: [Signature] 12/16/11
(Signature) (Date)

For: AARON SHINMOTO, Planning Program Administrator, Zoning Administration and Enforcement Division

DEC 15 2011

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COUNTY OF MAUI
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Facsimile: (808) 270-7634
E-mail: planning@mauicounty.gov

ZONING AND FLOOD CONFIRMATION FORM

(This section to be completed by the Applicant)

APPLICANT NAME Maui R&T Partners, LLC. (Brett Davis, Planner) TELEPHONE 808-270-1561
PROJECT NAME Maui Research and Technology Park E-MAIL bdavis@chpmaui.com
PROPERTY ADDRESS Lipoa Parkway mauka of Pili Highway, Kihei, Maui, HI TAX MAP KEY (2) 2-2-024:017

Yes No Will this Zoning & Flood Confirmation Form be used with a Subdivision Application?
If "Yes", answer questions A and B below:
A) Will it be processed under one of the consistency exemptions of Section 18.04.030(B), MCC? Yes No
If "Yes", which exemption? _____
B) Provide the purpose of subdivision and the proposed land uses below: _____

- NOTE: 1) Use a separate Zoning & Flood Confirmation Form for each Tax Map Key (TMK) number.
2) If this will be used with a subdivision application AND if the zoning information for the subject property contains multiple State Land Use Districts, Community Plan Designations, or County Zoning, a signed and dated Land Use Designations (LUD) Map, prepared by a licensed surveyor showing all the various districts, designations, zonings, and any subdistricts, shall be submitted for review and approval.
3) If this will be used with a subdivision application AND if there are multiple State Land Use District designations, the applicant shall procure a District Boundary Interpretation from the State Land Use Commission.

(This section to be completed by ZAED)

LAND USE DESIGNATIONS (LUD) AND OTHER ZONING INFORMATION:

STATE LAND USE DISTRICT(S) Urban & Agricultural
COMMUNITY PLAN DESIGNATION(S) P/AP - Public-Quasi/Public (only 20 acres)
COUNTY ZONING(S) Ag - Agricultural
OTHER DESIGNATION(S)/COMMENTS Applicant needs to confirm with state and LUD designations

Yes No
(SMA) SPECIAL
MANAGEMENT
AREA
 Yes No
(PH) PLANNED
DEVELOPMENT
 Yes No
(PD) PROJECT
DISTRICT

Yes No
See Additional Comments On Page Two

Yes No
See The Attached Land Use Designation Map

FLOOD INFORMATION:

FLOOD HAZARD AREA ZONE(S) X For Flood Zone AO, FLOOD DEPTH _____
BASE FLOOD ELEVATION(S) N/A feet mean sea level, Local Tidal Datum.

*FLOODWAY Yes No *FLOOD DEVELOPMENT PERMIT REQUIRED Yes No
* For flood hazard area zones X or XS, a flood development permit would be required if any work is done in any drainage facility or stream area that would reduce the capacity of the drainage facility, river, or stream, or adversely affect downstream property.
* For subdivisions in ALL FLOOD HAZARD AREA ZONES (including zones X or XS) that involve streams, gulches, low areas, or any type of drainageway, a designation of the 100 year flood inundation limits or a drainage reserve may be required.

SUBDIVISION CONSISTENCY:

N/A (Not Applicable)

**The Land Use Designations (LUD) align and a unilateral agreement is not required.

**The LUD's do not align and the available or proposed land uses appear to be:

Consistent, with a Department of Public Works / Planning unilateral agreement.
 Not Consistent. Comments: _____

(Signature)
Except as permitted in Section 18.04.030(B) MCC, property containing Interim Zoning shall NOT be subdivided.

** All proposed subdivisions will be further reviewed during the subdivision application process to verify consistency, unilateral agreement requirements, and the conditions associated with a unilateral agreement [Section 18.04.030(D), Maui County Code].

REVIEWED & CONFIRMED BY:

Aaron Shinmoto
(Signature)

12/16/11
(Date)

For: AARON SHINMOTO, Planning Program Administrator, Zoning Administration and Enforcement Division

DEC 15 2011

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Facsimile: (808) 270-7634
E-mail: planning@mauicounty.gov

ZONING AND FLOOD CONFIRMATION FORM

(This section to be completed by the Applicant)

APPLICANT NAME Maui R&T Partners, LLC. (Brett Davis, Planner) TELEPHONE 808-270-1561
PROJECT NAME Maui Research and Technology Park E-MAIL bdavis@chpmaui.com
PROPERTY ADDRESS Lipoa Parkway mauka of Piilani Highway, Kihei, Maui, HI TAX MAP KEY (2) 2-2-024:018

Yes No Will this Zoning & Flood Confirmation Form be used with a Subdivision Application?
If "Yes", answer questions A and B below:
A) Will it be processed under one of the consistency exemptions of Section 18.04.030(B), MCC? Yes No
If "Yes", which exemption? _____
B) Provide the purpose of subdivision and the proposed land uses below: _____

- NOTE: 1) Use a separate Zoning & Flood Confirmation Form for each Tax Map Key (TMK) number.
 2) If this will be used with a subdivision application AND if the zoning information for the subject property contains multiple State Land Use Districts, Community Plan Designations, or County Zoning, a signed and dated Land Use Designations (LUD) Map, prepared by a licensed surveyor showing all the various districts, designations, zonings, and any subdistricts, shall be submitted for review and approval.
 3) If this will be used with a subdivision application AND if there are multiple State Land Use District designations, the applicant shall procure a District Boundary Interpretation from the State Land Use Commission.

(This section to be completed by ZAED)

LAND USE DESIGNATIONS (LUD) AND OTHER ZONING INFORMATION:

STATE LAND USE DISTRICT(S) Urban
COMMUNITY PLAN DESIGNATION(S) Agriculture
COUNTY ZONING(S) Agriculture
OTHER DESIGNATION(S)/COMMENTS N/A

Yes No
(SMA) SPECIAL MANAGEMENT AREA

Yes No
(PH) PLANNED DEVELOPMENT

Yes No
(PD) PROJECT DISTRICT

Yes No See Additional Comments On Page Two

Yes No See The Attached Land Use Designation Map

FLOOD INFORMATION:

FLOOD HAZARD AREA ZONE(S) X For Flood Zone AO, FLOOD DEPTH N/A
BASE FLOOD ELEVATION(S) N/A feet mean sea level, Local Tidal Datum.

*FLOODWAY Yes No *FLOOD DEVELOPMENT PERMIT REQUIRED Yes No
 * For flood hazard area zones X or XS, a flood development permit would be required if any work is done in any drainage facility or stream area that would reduce the capacity of the drainage facility, river, or stream, or adversely affect downstream property.
 * For subdivisions in ALL FLOOD HAZARD AREA ZONES (including zones X or XS) that involve streams, gulches, low areas, or any type of drainageway, a designation of the 100 year flood inundation limits or a drainage reserve may be required.

SUBDIVISION CONSISTENCY:

N/A (Not Applicable)

**The Land Use Designations (LUD) align and a unilateral agreement is not required.

**The LUD's do not align and the available or proposed land uses appear to be:

Consistent, with a Department of Public Works / Planning unilateral agreement.

Not Consistent. Comments: _____

(Signature)
Except as permitted in Section 18.04.030(B) MCC, property containing Interim Zoning shall NOT be subdivided.

** All proposed subdivisions will be further reviewed during the subdivision application process to verify consistency, unilateral agreement requirements, and the conditions associated with a unilateral agreement [Section 18.04.030(D), Maui County Code].

REVIEWED & CONFIRMED BY:

Aaron Shinmoto
(Signature)

12/19/11
(Date)

For: AARON SHINMOTO, Planning Program Administrator, Zoning Administration and Enforcement Division

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COUNTY OF MAUI
DEPARTMENT OF PLANNING
Kalana Pakui Building
250 South High Street
Wailuku, Hawaii 96793



Zoning Administration and
Enforcement Division (ZAED)
Telephone: (808) 270-7253
Facsimile: (808) 270-7634
E-mail: planning@mauicounty.gov

ZONING AND FLOOD CONFIRMATION FORM

(This section to be completed by the Applicant)

APPLICANT NAME Maui R&T Partners, LLC. (Brett Davis, Planner) TELEPHONE 808-270-1561
PROJECT NAME Maui Research and Technology Park E-MAIL bdavis@chpmaui.com
PROPERTY ADDRESS Lipoa Parkway mauka of Piilani Highway, Kihei, Maui, HI TAX MAP KEY (2) 2-2-024:032

Yes No Will this Zoning & Flood Confirmation Form be used with a Subdivision Application?
If "Yes", answer questions A and B below:

A) Will it be processed under one of the consistency exemptions of Section 18.04.030(B), MCC? Yes No
If "Yes", which exemption? _____

B) Provide the purpose of subdivision and the proposed land uses below: _____

- NOTE: 1) Use a separate Zoning & Flood Confirmation Form for each Tax Map Key (TMK) number.
2) If this will be used with a subdivision application AND if the zoning information for the subject property contains multiple State Land Use Districts, Community Plan Designations, or County Zoning, a signed and dated Land Use Designations (LUD) Map, prepared by a licensed surveyor showing all the various districts, designations, zonings, and any subdistricts, shall be submitted for review and approval.
3) If this will be used with a subdivision application AND if there are multiple State Land Use District designations, the applicant shall procure a District Boundary Interpretation from the State Land Use Commission.

(This section to be completed by ZAED)

LAND USE DESIGNATIONS (LUD) AND OTHER ZONING INFORMATION:
STATE LAND USE DISTRICT(S) Urban
COMMUNITY PLAN DESIGNATION(S) Project District 6
COUNTY ZONING(S) Kihei Research & Technology Park
OTHER DESIGNATION(S)/COMMENTS N/A

Yes No
(SMA) SPECIAL MANAGEMENT AREA

Yes No
(PH) PLANNED DEVELOPMENT

Yes No
(PD) PROJECT DISTRICT

Yes No See Additional Comments On Page Two

Yes No See The Attached Land Use Designation Map

FLOOD INFORMATION:

FLOOD HAZARD AREA ZONE(S) X For Flood Zone AO, FLOOD DEPTH N/A
BASE FLOOD ELEVATION(S) N/A feet mean sea level, Local Tidal Datum.

*FLOODWAY Yes No *FLOOD DEVELOPMENT PERMIT REQUIRED Yes No
* For flood hazard area zones X or XS, a flood development permit would be required if any work is done in any drainage facility or stream area that would reduce the capacity of the drainage facility, river, or stream, or adversely affect downstream property.
* For subdivisions in ALL FLOOD HAZARD AREA ZONES (including zones X or XS) that involve streams, gulches, low areas, or any type of draingeway, a designation of the 100 year flood inundation limits or a drainage reserve may be required.

SUBDIVISION CONSISTENCY:

N/A (Not Applicable)

**The Land Use Designations (LUD) align and a unilateral agreement is not required.

**The LUD's do not align and the available or proposed land uses appear to be:

Consistent, with a Department of Public Works / Planning unilateral agreement.

Not Consistent. Comments: _____

(Signature)
Except as permitted in Section 18.04.030(B) MCC, property containing Interim Zoning shall NOT be subdivided.

** All proposed subdivisions will be further reviewed during the subdivision application process to verify consistency, unilateral agreement requirements, and the conditions associated with a unilateral agreement [Section 18.04.030(D), Maui County Code].

REVIEWED & CONFIRMED BY:

[Signature]
(Signature)

12/19/11
(Date)

For: AARON SHINMOTO, Planning Program Administrator, Zoning Administration and Enforcement Division

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Facsimile: (808) 270-7634
E-mail: planning@mauicounty.gov

ZONING AND FLOOD CONFIRMATION FORM

(This section to be completed by the Applicant)

APPLICANT NAME Maui R&T Partners, LLC. (Brett Davis, Planner) TELEPHONE 808-270-1561

PROJECT NAME Maui Research and Technology Park E-MAIL bdavis@chpmaui.com

PROPERTY ADDRESS Lipoa Parkway mauka of Pillani Highway, Kihei, Maui, HI TAX MAP KEY (2) 2-2-024:034

Yes No Will this Zoning & Flood Confirmation Form be used with a Subdivision Application?
If "Yes", answer questions A and B below:

A) Will it be processed under one of the consistency exemptions of Section 18.04.030(B), MCC? Yes No
If "Yes", which exemption? _____

B) Provide the purpose of subdivision and the proposed land uses below: _____

- NOTE: 1) Use a separate Zoning & Flood Confirmation Form for each Tax Map Key (TMK) number.
2) If this will be used with a subdivision application AND if the zoning information for the subject property contains multiple State Land Use Districts, Community Plan Designations, or County Zoning, a signed and dated Land Use Designations (LUD) Map, prepared by a licensed surveyor showing all the various districts, designations, zonings, and any subdistricts, shall be submitted for review and approval.
3) If this will be used with a subdivision application AND if there are multiple State Land Use District designations, the applicant shall procure a District Boundary Interpretation from the State Land Use Commission.

(This section to be completed by ZAED)

LAND USE DESIGNATIONS (LUD) AND OTHER ZONING INFORMATION:

STATE LAND USE DISTRICT(S) Urban

COMMUNITY PLAN DESIGNATION(S) PD-C - Project District C R&T Park

COUNTY ZONING(S) R&T Kihei - Kihei Research & Technology Park

OTHER DESIGNATION(S)/COMMENTS _____

Yes No
See Additional Comments On Page Two

Yes No
See The Attached Land Use Designation Map

Yes No
(SMA) SPECIAL MANAGEMENT AREA

Yes No
(PH) PLANNED DEVELOPMENT

Yes No
(PD) PROJECT DISTRICT

FLOOD INFORMATION:

FLOOD HAZARD AREA ZONE(S) X For Flood Zone AO, FLOOD DEPTH _____

BASE FLOOD ELEVATION(S) N/A feet mean sea level, Local Tidal Datum.

*FLOODWAY Yes No *FLOOD DEVELOPMENT PERMIT REQUIRED Yes No

- * For flood hazard area zones X or XS, a flood development permit would be required if any work is done in any drainage facility or stream area that would reduce the capacity of the drainage facility, river, or stream, or adversely affect downstream property.
* For subdivisions in ALL FLOOD HAZARD AREA ZONES (including zones X or XS) that involve streams, gulches, low areas, or any type of drainage, a designation of the 100 year flood inundation limits or a drainage reserve may be required.

SUBDIVISION CONSISTENCY:

N/A (Not Applicable)

**The Land Use Designations (LUD) align and a unilateral agreement is not required.

**The LUD's do not align and the available or proposed land uses appear to be:

Consistent, with a Department of Public Works / Planning unilateral agreement.

Not Consistent. Comments: _____

(Signature)
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** All proposed subdivisions will be further reviewed during the subdivision application process to verify consistency, unilateral agreement requirements, and the conditions associated with a unilateral agreement [Section 18.04.030(D), Maui County Code].

REVIEWED & CONFIRMED BY:

[Signature] (SP)

12/16/11

For: AARON SHINMOTO, Planning Program Administrator, Zoning Administration and Enforcement Division

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DEPARTMENT OF PLANNING
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250 South High Street
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Facsimile: (808) 270-7634
E-mail: planning@mauicounty.gov

ZONING AND FLOOD CONFIRMATION FORM

(This section to be completed by the Applicant)

APPLICANT NAME Maui R&T Partners, LLC. (Brett Davis, Planner) TELEPHONE 808-270-1561

PROJECT NAME Maui Research and Technology Park E-MAIL bdavis@chpmaui.com

PROPERTY ADDRESS Lipoa Parkway mauka of Piilani Highway, Kihei, Maui, HI TAX MAP KEY (2) 2-2-024:036

Yes No Will this Zoning & Flood Confirmation Form be used with a Subdivision Application?

If "Yes", answer questions A and B below:

A) Will it be processed under one of the consistency exemptions of Section 18.04.030(B), MCC? Yes No

If "Yes", which exemption? _____

B) Provide the purpose of subdivision and the proposed land uses below: _____

- NOTE: 1) Use a separate Zoning & Flood Confirmation Form for each Tax Map Key (TMK) number.
 2) If this will be used with a subdivision application AND if the zoning information for the subject property contains multiple State Land Use Districts, Community Plan Designations, or County Zoning, a signed and dated Land Use Designations (LUD) Map, prepared by a licensed surveyor showing all the various districts, designations, zonings, and any subdistricts, shall be submitted for review and approval.
 3) If this will be used with a subdivision application AND if there are multiple State Land Use District designations, the applicant shall procure a District Boundary Interpretation from the State Land Use Commission.

(This section to be completed by ZAED)

LAND USE DESIGNATIONS (LUD) AND OTHER ZONING INFORMATION:

STATE LAND USE DISTRICT(S) Urban, may include Agriculture *

COMMUNITY PLAN DESIGNATION(S) Project District 6

COUNTY ZONING(S) Kihei Research & Technology Park

OTHER DESIGNATION(S)/COMMENTS Confirm w/ state *

Yes No
See Additional Comments On Page Two

Yes No
See The Attached Land Use Designation Map

Yes No
(SMA) SPECIAL
MANAGEMENT
AREA

Yes No
(PH) PLANNED
DEVELOPMENT

Yes No
(PD) PROJECT
DISTRICT

FLOOD INFORMATION:

FLOOD HAZARD AREA ZONE(S) X For Flood Zone AO, FLOOD DEPTH N/A

BASE FLOOD ELEVATION(S) N/A feet mean sea level, Local Tidal Datum.

*FLOODWAY Yes No *FLOOD DEVELOPMENT PERMIT REQUIRED Yes No

* For flood hazard area zones X or XS, a flood development permit would be required if any work is done in any drainage facility or stream area that would reduce the capacity of the drainage facility, river, or stream, or adversely affect downstream property.

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SUBDIVISION CONSISTENCY: N/A (Not Applicable)

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Consistent, with a Department of Public Works / Planning unilateral agreement.

Not Consistent. Comments: _____

(Signature)
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** All proposed subdivisions will be further reviewed during the subdivision application process to verify consistency, unilateral agreement requirements, and the conditions associated with a unilateral agreement [Section 18.04.030(D), Maui County Code].

REVIEWED & CONFIRMED BY:

Aaron Shinmoto
(Signature)

12/20/11
(Date)

For: AARON SHINMOTO, Planning Program Administrator, Zoning Administration and Enforcement Division

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Facsimile: (808) 270-7634
E-mail: planning@mauicounty.gov

ZONING AND FLOOD CONFIRMATION FORM

(This section to be completed by the Applicant)

APPLICANT NAME Maui R&T Partners, LLC. (Brett Davis, Planner) TELEPHONE 808-270-1561
PROJECT NAME Maui Research and Technology Park E-MAIL bdavis@chpmaui.com
PROPERTY ADDRESS Lipoa Parkway mauka of Piilani Highway, Kihei, Maui, HI TAX MAP KEY (2) 2-2-024:037

Yes No Will this Zoning & Flood Confirmation Form be used with a Subdivision Application?
If "Yes", answer questions A and B below:

A) Will it be processed under one of the consistency exemptions of Section 18.04.030(B), MCC? Yes No
If "Yes", which exemption? _____

B) Provide the purpose of subdivision and the proposed land uses below: _____

- NOTE: 1) Use a separate Zoning & Flood Confirmation Form for each Tax Map Key (TMK) number.
2) If this will be used with a subdivision application AND if the zoning information for the subject property contains multiple State Land Use Districts, Community Plan Designations, or County Zoning, a signed and dated Land Use Designations (LUD) Map, prepared by a licensed surveyor showing all the various districts, designations, zonings, and any subdistricts, shall be submitted for review and approval.
3) If this will be used with a subdivision application AND if there are multiple State Land Use District designations, the applicant shall procure a District Boundary Interpretation from the State Land Use Commission.

(This section to be completed by ZAED)

LAND USE DESIGNATIONS (LUD) AND OTHER ZONING INFORMATION:

STATE LAND USE DISTRICT(S) Urban
COMMUNITY PLAN DESIGNATION(S) Project District 6
COUNTY ZONING(S) Kihei Research & Technology Park
OTHER DESIGNATION(S)/COMMENTS N/A

Yes No
(SMA) SPECIAL MANAGEMENT AREA

Yes No
(PH) PLANNED DEVELOPMENT

Yes No
(PD) PROJECT DISTRICT

Yes No See Additional Comments On Page Two

Yes No See The Attached Land Use Designation Map

FLOOD INFORMATION:

FLOOD HAZARD AREA ZONE(S) X For Flood Zone AO, FLOOD DEPTH N/A
BASE FLOOD ELEVATION(S) N/A feet mean sea level, Local Tidal Datum.
*FLOODWAY Yes No *FLOOD DEVELOPMENT PERMIT REQUIRED Yes No

* For flood hazard area zones X or XS, a flood development permit would be required if any work is done in any drainage facility or stream area that would reduce the capacity of the drainage facility, river, or stream, or adversely affect downstream property.
* For subdivisions in ALL FLOOD HAZARD AREA ZONES (including zones X or XS) that involve streams, gulches, low areas, or any type of drainage, a designation of the 100 year flood inundation limits or a drainage reserve may be required.

SUBDIVISION CONSISTENCY:

N/A (Not Applicable)

- **The Land Use Designations (LUD) align and a unilateral agreement is not required.
- **The LUD's do not align and the available or proposed land uses appear to be:
- Consistent, with a Department of Public Works / Planning unilateral agreement.
- Not Consistent. Comments: _____

(Signature)
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REVIEWED & CONFIRMED BY:

[Signature] (Signature) 12/19/11 (Date)
For: AARON SHINMOTO, Planning Program Administrator, Zoning Administration and Enforcement Division

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COUNTY OF MAUI
DEPARTMENT OF PLANNING
Kalana Pakui Building
250 South High Street
Wailuku, Hawaii 96793



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Telephone: (808) 270-7253
Facsimile: (808) 270-7634
E-mail: planning@mauicounty.gov

ZONING AND FLOOD CONFIRMATION FORM

(This section to be completed by the Applicant)

APPLICANT NAME Maui R&T Partners, LLC. (Brett Davis, Planner) TELEPHONE 808-270-1561
PROJECT NAME Maui Research and Technology Park E-MAIL bdavis@chpmaui.com
PROPERTY ADDRESS Lipoa Parkway mauka of Piilani Highway, Kihei, Maui, HI TAX MAP KEY (2) 2-2-024:038

Yes No Will this Zoning & Flood Confirmation Form be used with a Subdivision Application?
If "Yes", answer questions A and B below:
A) Will it be processed under one of the consistency exemptions of Section 18.04.030(B), MCC? Yes No
If "Yes", which exemption? _____
B) Provide the purpose of subdivision and the proposed land uses below:

- NOTE: 1) Use a separate Zoning & Flood Confirmation Form for each Tax Map Key (TMK) number.
 2) **If this will be used with a subdivision application** AND if the zoning information for the subject property contains multiple State Land Use Districts, Community Plan Designations, or County Zoning, a signed and dated Land Use Designations (LUD) Map, prepared by a licensed surveyor showing all the various districts, designations, zonings, and any subdistricts, shall be submitted for review and approval.
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(This section to be completed by ZAED)

LAND USE DESIGNATIONS (LUD) AND OTHER ZONING INFORMATION:

STATE LAND USE DISTRICT(S) Urban, may include Agriculture*
COMMUNITY PLAN DESIGNATION(S) Project District 6
COUNTY ZONING(S) Kihei Research & Technology Park
OTHER DESIGNATION(S)/COMMENTS Confirm w/ State*

Yes No
(SMA) SPECIAL MANAGEMENT AREA

Yes No
(PH) PLANNED DEVELOPMENT

Yes No
(PD) PROJECT DISTRICT

Yes No
See Additional Comments On Page Two

Yes No
See The Attached Land Use Designation Map

FLOOD INFORMATION:

FLOOD HAZARD AREA ZONE(S) X For Flood Zone AO, FLOOD DEPTH N/A
BASE FLOOD ELEVATION(S) N/A feet mean sea level, Local Tidal Datum.

*FLOODWAY Yes No *FLOOD DEVELOPMENT PERMIT REQUIRED Yes No
* For flood hazard area zones X or XS, a flood development permit would be required if any work is done in any drainage facility or stream area that would reduce the capacity of the drainage facility, river, or stream, or adversely affect downstream property.
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SUBDIVISION CONSISTENCY: N/A (Not Applicable)

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**The LUD's do not align and the available or proposed land uses appear to be:

Consistent, with a Department of Public Works / Planning unilateral agreement.

Not Consistent. Comments: _____

(Signature)
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REVIEWED & CONFIRMED BY:

[Signature]
(Signature)

12/19/11
(Date)

For: AARON SHINMOTO, Planning Program Administrator, Zoning Administration and Enforcement Division

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Facsimile: (808) 270-7634
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ZONING AND FLOOD CONFIRMATION FORM

(This section to be completed by the Applicant)

APPLICANT NAME Maui R&T Partners, LLC. (Brett Davis, Planner) TELEPHONE 808-270-1561
PROJECT NAME Maui Research and Technology Park E-MAIL bdavis@chpmaui.com
PROPERTY ADDRESS Lipoa Parkway mauka of Piilani Highway, Kihei, Maui, HI TAX MAP KEY (2) 2-2-024:039

Yes No Will this Zoning & Flood Confirmation Form be used with a Subdivision Application?
If "Yes", answer questions A and B below:

A) Will it be processed under one of the consistency exemptions of Section 18.04.030(B), MCC? Yes No
If "Yes", which exemption? _____

B) Provide the purpose of subdivision and the proposed land uses below:

- NOTE: 1) Use a separate Zoning & Flood Confirmation Form for each Tax Map Key (TMK) number.
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(This section to be completed by ZAED)

LAND USE DESIGNATIONS (LUD) AND OTHER ZONING INFORMATION:
STATE LAND USE DISTRICT(S) Urban, may include Agriculture *
COMMUNITY PLAN DESIGNATION(S) Project District 6
COUNTY ZONING(S) Kihei Research & Technology Park
OTHER DESIGNATION(S)/COMMENTS Confirm w/ State *

Yes No
(SMA) SPECIAL MANAGEMENT AREA

Yes No
(PH) PLANNED DEVELOPMENT

Yes No
(PD) PROJECT DISTRICT

Yes No See Additional Comments On Page Two

Yes No See The Attached Land Use Designation Map

FLOOD INFORMATION:
FLOOD HAZARD AREA ZONE(S) X For Flood Zone AO, FLOOD DEPTH N/A
BASE FLOOD ELEVATION(S) N/A feet mean sea level, Local Tidal Datum.
*FLOODWAY Yes No *FLOOD DEVELOPMENT PERMIT REQUIRED Yes No
* For flood hazard area zones X or XS, a flood development permit would be required if any work is done in any drainage facility or stream area that would reduce the capacity of the drainage facility, river, or stream, or adversely affect downstream property.
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SUBDIVISION CONSISTENCY: N/A (Not Applicable)

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 **The LUD's do not align and the available or proposed land uses appear to be:
 Consistent, with a Department of Public Works / Planning unilateral agreement.
 Not Consistent. Comments: _____

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REVIEWED & CONFIRMED BY: [Signature] 12/19/11
(Signature) (Date)
For: AARON SHINMOTO, Planning Program Administrator, Zoning Administration and Enforcement Division

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ZONING AND FLOOD CONFIRMATION FORM

(This section to be completed by the Applicant)

APPLICANT NAME Maui R&T Partners, LLC. (Brett Davis, Planner) TELEPHONE 808-270-1561

PROJECT NAME Maui Research and Technology Park E-MAIL bdavis@chpmaui.com

PROPERTY ADDRESS Lipoa Parkway mauka of Piilani Highway, Kihei, Maui, HI TAX MAP KEY (2) 2-2-024:040

Yes No Will this Zoning & Flood Confirmation Form be used with a Subdivision Application?
 If "Yes", answer questions A and B below:
 A) Will it be processed under one of the consistency exemptions of Section 18.04.030(B), MCC? Yes No
 If "Yes", which exemption? _____
 B) Provide the purpose of subdivision and the proposed land uses below: _____

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(This section to be completed by ZAED)

LAND USE DESIGNATIONS (LUD) AND OTHER ZONING INFORMATION:
 STATE LAND USE DISTRICT(S) Urban, may include Agriculture *
 COMMUNITY PLAN DESIGNATION(S) Project District 6
 COUNTY ZONING(S) Kihei Research & Technology Park
 OTHER DESIGNATION(S)/COMMENTS Confirm w/ State *

Yes No
(SMA) SPECIAL MANAGEMENT AREA

Yes No
(PH) PLANNED DEVELOPMENT

Yes No
(PD) PROJECT DISTRICT

Yes No See Additional Comments On Page Two

Yes No See The Attached Land Use Designation Map

FLOOD INFORMATION:
 FLOOD HAZARD AREA ZONE(S) X For Flood Zone AO, FLOOD DEPTH N/A
 BASE FLOOD ELEVATION(S) N/A feet mean sea level, Local Tidal Datum.
 *FLOODWAY Yes No *FLOOD DEVELOPMENT PERMIT REQUIRED Yes No
 * For flood hazard area zones X or XS, a flood development permit would be required if any work is done in any drainage facility or stream area that would reduce the capacity of the drainage facility, river, or stream, or adversely affect downstream property.
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SUBDIVISION CONSISTENCY: N/A (Not Applicable)

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REVIEWED & CONFIRMED BY:
[Signature] (Signature) 12/19/11 (Date)
 For: AARON SHINMOTO, Planning Program Administrator, Zoning Administration and Enforcement Division

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ZONING AND FLOOD CONFIRMATION FORM

(This section to be completed by the Applicant)

APPLICANT NAME Maui R&T Partners, LLC. (Brett Davis, Planner) TELEPHONE 808-270-1561
PROJECT NAME Maui Research and Technology Park E-MAIL bdavis@chpmaui.com
PROPERTY ADDRESS Lipoa Parkway mauka of Piilani Highway, Kihei, Maui, HI TAX MAP KEY (2) 2-2-024:041

Yes No Will this Zoning & Flood Confirmation Form be used with a Subdivision Application?
If "Yes", answer questions A and B below:

A) Will it be processed under one of the consistency exemptions of Section 18.04.030(B), MCC? Yes No
If "Yes", which exemption? _____

B) Provide the purpose of subdivision and the proposed land uses below: _____

- NOTE: 1) Use a separate Zoning & Flood Confirmation Form for each Tax Map Key (TMK) number.
2) If this will be used with a subdivision application AND if the zoning information for the subject property contains multiple State Land Use Districts, Community Plan Designations, or County Zoning, a signed and dated Land Use Designations (LUD) Map, prepared by a licensed surveyor showing all the various districts, designations, zonings, and any subdistricts, shall be submitted for review and approval.
3) If this will be used with a subdivision application AND if there are multiple State Land Use District designations, the applicant shall procure a District Boundary Interpretation from the State Land Use Commission.

(This section to be completed by ZAED)

LAND USE DESIGNATIONS (LUD) AND OTHER ZONING INFORMATION:
STATE LAND USE DISTRICT(S) Urban
COMMUNITY PLAN DESIGNATION(S) Project District 6
COUNTY ZONING(S) Kihei Research + Technology Park
OTHER DESIGNATION(S)/COMMENTS N/A

Yes No
(SMA) SPECIAL MANAGEMENT AREA

Yes No
(PH) PLANNED DEVELOPMENT

Yes No
(PD) PROJECT DISTRICT

Yes No See Additional Comments On Page Two

Yes No See The Attached Land Use Designation Map

FLOOD INFORMATION:
FLOOD HAZARD AREA ZONE(S) X For Flood Zone AO, FLOOD DEPTH N/A
BASE FLOOD ELEVATION(S) N/A feet mean sea level, Local Tidal Datum.
*FLOODWAY Yes No *FLOOD DEVELOPMENT PERMIT REQUIRED Yes No
* For flood hazard area zones X or XS, a flood development permit would be required if any work is done in any drainage facility or stream area that would reduce the capacity of the drainage facility, river, or stream, or adversely affect downstream property.
* For subdivisions in ALL FLOOD HAZARD AREA ZONES (including zones X or XS) that involve streams, gulches, low areas, or any type of draingeway, a designation of the 100 year flood inundation limits or a drainage reserve may be required.

SUBDIVISION CONSISTENCY: N/A (Not Applicable)

**The Land Use Designations (LUD) align and a unilateral agreement is not required.
 **The LUD's do not align and the available or proposed land uses appear to be:
 Consistent, with a Department of Public Works / Planning unilateral agreement.
 Not Consistent. Comments: _____

(Signature)
Except as permitted in Section 18.04.030(B) MCC, property containing Interim Zoning shall NOT be subdivided.

** All proposed subdivisions will be further reviewed during the subdivision application process to verify consistency, unilateral agreement requirements, and the conditions associated with a unilateral agreement [Section 18.04.030(D), Maui County Code].

REVIEWED & CONFIRMED BY:
Aaron Shinmoto (Signature) 12/19/11 (Date)
For: AARON SHINMOTO, Planning Program Administrator, Zoning Administration and Enforcement Division

DEC 15 2011
RECEIVED

COUNTY OF MAUI
DEPARTMENT OF PLANNING
Kalana Pakui Building
250 South High Street
Wailuku, Hawaii 96793



Zoning Administration and
Enforcement Division (ZAED)
Telephone: (808) 270-7253
Facsimile: (808) 270-7634
E-mail: planning@mauicounty.gov

ZONING AND FLOOD CONFIRMATION FORM

(This section to be completed by the Applicant)

APPLICANT NAME Maui R&T Partners, LLC. (Brett Davis, Planner) TELEPHONE 808-270-1561
PROJECT NAME Maui Research and Technology Park E-MAIL bdavis@chpmaui.com
PROPERTY ADDRESS Lipoa Parkway mauka of Piilani Highway, Kihei, Maui, HI TAX MAP KEY (2) 2-2-024:042

Yes No Will this Zoning & Flood Confirmation Form be used with a Subdivision Application?
If "Yes", answer questions A and B below:

A) Will it be processed under one of the consistency exemptions of Section 18.04.030(B), MCC? Yes No
If "Yes", which exemption? _____

B) Provide the purpose of subdivision and the proposed land uses below: _____

- NOTE: 1) Use a separate Zoning & Flood Confirmation Form for each Tax Map Key (TMK) number.
2) If this will be used with a subdivision application AND if the zoning information for the subject property contains multiple State Land Use Districts, Community Plan Designations, or County Zoning, a signed and dated Land Use Designations (LUD) Map, prepared by a licensed surveyor showing all the various districts, designations, zonings, and any subdistricts, shall be submitted for review and approval.
3) If this will be used with a subdivision application AND if there are multiple State Land Use District designations, the applicant shall procure a District Boundary Interpretation from the State Land Use Commission.

(This section to be completed by ZAED)

LAND USE DESIGNATIONS (LUD) AND OTHER ZONING INFORMATION:

STATE LAND USE DISTRICT(S) Urban
COMMUNITY PLAN DESIGNATION(S) Project District 6
COUNTY ZONING(S) Kihei Research & Technology Park
OTHER DESIGNATION(S)/COMMENTS N/A

Yes No
(SMA) SPECIAL MANAGEMENT AREA

Yes No
(PH) PLANNED DEVELOPMENT

Yes No
(PD) PROJECT DISTRICT

Yes No See Additional Comments On Page Two

Yes No See The Attached Land Use Designation Map

FLOOD INFORMATION:

FLOOD HAZARD AREA ZONE(S) X For Flood Zone AO, FLOOD DEPTH N/A
BASE FLOOD ELEVATION(S) N/A feet mean sea level, Local Tidal Datum.
*FLOODWAY Yes No *FLOOD DEVELOPMENT PERMIT REQUIRED Yes No

* For flood hazard area zones X or XS, a flood development permit would be required if any work is done in any drainage facility or stream area that would reduce the capacity of the drainage facility, river, or stream, or adversely affect downstream property.
* For subdivisions in ALL FLOOD HAZARD AREA ZONES (including zones X or XS) that involve streams, gulches, low areas, or any type of draingeway, a designation of the 100 year flood inundation limits or a drainage reserve may be required.

SUBDIVISION CONSISTENCY:

N/A (Not Applicable)

**The Land Use Designations (LUD) align and a unilateral agreement is not required.

**The LUD's do not align and the available or proposed land uses appear to be:

Consistent, with a Department of Public Works / Planning unilateral agreement.

Not Consistent. Comments: _____

(Signature)
Except as permitted in Section 18.04.030(B) MCC, property containing Interim Zoning shall NOT be subdivided.

** All proposed subdivisions will be further reviewed during the subdivision application process to verify consistency, unilateral agreement requirements, and the conditions associated with a unilateral agreement [Section 18.04.030(D), Maui County Code].

REVIEWED & CONFIRMED BY:

[Signature]
(Signature)

12/19/11
(Date)

For: AARON SHINMOTO, Planning Program Administrator, Zoning Administration and Enforcement Division

DEC 15 2011

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Facsimile: (808) 270-7634
E-mail: planning@mauicounty.gov

ZONING AND FLOOD CONFIRMATION FORM

(This section to be completed by the Applicant)

APPLICANT NAME Maui R&T Partners, LLC. (Brett Davis, Planner) TELEPHONE 808-270-1561

PROJECT NAME Maui Research and Technology Park E-MAIL bdavis@chpmaui.com

PROPERTY ADDRESS Lipoa Parkway mauka of Piilani Highway, Kihei, Maui, HI TAX MAP KEY (2) 2-2-024:043

Yes No Will this Zoning & Flood Confirmation Form be used with a Subdivision Application?
If "Yes", answer questions A and B below:

A) Will it be processed under one of the consistency exemptions of Section 18.04.030(B), MCC? Yes No
If "Yes", which exemption? _____

B) Provide the purpose of subdivision and the proposed land uses below: _____

- NOTE: 1) Use a separate Zoning & Flood Confirmation Form for each Tax Map Key (TMK) number.
 2) If this will be used with a subdivision application AND if the zoning information for the subject property contains multiple State Land Use Districts, Community Plan Designations, or County Zoning, a signed and dated Land Use Designations (LUD) Map, prepared by a licensed surveyor showing all the various districts, designations, zonings, and any subdistricts, shall be submitted for review and approval.
 3) If this will be used with a subdivision application AND if there are multiple State Land Use District designations, the applicant shall procure a District Boundary Interpretation from the State Land Use Commission.

(This section to be completed by ZAED)

LAND USE DESIGNATIONS (LUD) AND OTHER ZONING INFORMATION:

STATE LAND USE DISTRICT(S) Urban

COMMUNITY PLAN DESIGNATION(S) Project District 6

COUNTY ZONING(S) Kihei Research & Technology Park

OTHER DESIGNATION(S)/COMMENTS N/A

Yes No
See Additional Comments On Page Two

Yes No
See The Attached Land Use Designation Map

Yes No
(SMA) SPECIAL
MANAGEMENT
AREA

Yes No
(PH) PLANNED
DEVELOPMENT

Yes No
(PD) PROJECT
DISTRICT

FLOOD INFORMATION:

FLOOD HAZARD AREA ZONE(S) X For Flood Zone AO, FLOOD DEPTH N/A

BASE FLOOD ELEVATION(S) N/A feet mean sea level, Local Tidal Datum.

*FLOODWAY Yes No *FLOOD DEVELOPMENT PERMIT REQUIRED Yes No

* For flood hazard area zones X or XS, a flood development permit would be required if any work is done in any drainage facility or stream area that would reduce the capacity of the drainage facility, river, or stream, or adversely affect downstream property.

* For subdivisions in ALL FLOOD HAZARD AREA ZONES (including zones X or XS) that involve streams, gulches, low areas, or any type of drainageway, a designation of the 100 year flood inundation limits or a drainage reserve may be required.

SUBDIVISION CONSISTENCY: N/A (Not Applicable)

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**The LUD's do not align and the available or proposed land uses appear to be:

Consistent, with a Department of Public Works / Planning unilateral agreement.

Not Consistent. Comments: _____

(Signature)
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REVIEWED & CONFIRMED BY:

Aaron Shinmoto
(Signature)

12/19/11
(Date)

For: AARON SHINMOTO, Planning Program Administrator, Zoning Administration and Enforcement Division

DEC 15 2011
RECEIVED

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Facsimile: (808) 270-7634
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ZONING AND FLOOD CONFIRMATION FORM

(This section to be completed by the Applicant)

APPLICANT NAME Maui R&T Partners, LLC. (Brett Davis, Planner) TELEPHONE 808-270-1561
PROJECT NAME Maui Research and Technology Park E-MAIL bdavis@chpmaui.com
PROPERTY ADDRESS Lipoa Parkway mauka of Piilani Highway, Kihei, Maui, HI TAX MAP KEY (2) 2-2-024:044

Yes No Will this Zoning & Flood Confirmation Form be used with a Subdivision Application?
If "Yes", answer questions A and B below:

A) Will it be processed under one of the consistency exemptions of Section 18.04.030(B), MCC? Yes No
If "Yes", which exemption? _____

B) Provide the purpose of subdivision and the proposed land uses below:

- NOTE: 1) Use a separate Zoning & Flood Confirmation Form for each Tax Map Key (TMK) number.
2) If this will be used with a subdivision application AND if the zoning information for the subject property contains multiple State Land Use Districts, Community Plan Designations, or County Zoning, a signed and dated Land Use Designations (LUD) Map, prepared by a licensed surveyor showing all the various districts, designations, zonings, and any subdistricts, shall be submitted for review and approval.
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(This section to be completed by ZAED)

LAND USE DESIGNATIONS (LUD) AND OTHER ZONING INFORMATION:
STATE LAND USE DISTRICT(S) Urban
COMMUNITY PLAN DESIGNATION(S) Project District 6
COUNTY ZONING(S) Kihei Research & Technology Park
OTHER DESIGNATION(S)/COMMENTS N/A

Yes No
(SMA) SPECIAL MANAGEMENT AREA

Yes No
(PH) PLANNED DEVELOPMENT

Yes No
(PD) PROJECT DISTRICT

Yes No See Additional Comments On Page Two

Yes No See The Attached Land Use Designation Map

FLOOD INFORMATION:

FLOOD HAZARD AREA ZONE(S) X For Flood Zone AO, FLOOD DEPTH N/A
BASE FLOOD ELEVATION(S) N/A feet mean sea level, Local Tidal Datum.

- *FLOODWAY Yes No *FLOOD DEVELOPMENT PERMIT REQUIRED Yes No
- * For flood hazard area zones X or XS, a flood development permit would be required if any work is done in any drainage facility or stream area that would reduce the capacity of the drainage facility, river, or stream, or adversely affect downstream property.
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SUBDIVISION CONSISTENCY:

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Consistent, with a Department of Public Works / Planning unilateral agreement.

Not Consistent. Comments: _____

(Signature)
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REVIEWED & CONFIRMED BY:

[Signature] (Signature) 12/19/11 (Date)
For: AARON SHINMOTO, Planning Program Administrator, Zoning Administration and Enforcement Division

DEC 15 2011

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E-mail: planning@mauicounty.gov

ZONING AND FLOOD CONFIRMATION FORM

(This section to be completed by the Applicant)

APPLICANT NAME Maui R&T Partners, LLC. (Brett Davis, Planner) TELEPHONE 808-270-1561
PROJECT NAME Maui Research and Technology Park E-MAIL bdavis@chpmaui.com
PROPERTY ADDRESS Lipoa Parkway mauka of Piilani Highway, Kihei, Maui, HI TAX MAP KEY (2) 2-2-024:045

Yes No Will this Zoning & Flood Confirmation Form be used with a Subdivision Application?
If "Yes", answer questions A and B below:

A) Will it be processed under one of the consistency exemptions of Section 18.04.030(B), MCC? Yes No
If "Yes", which exemption? _____

B) Provide the purpose of subdivision and the proposed land uses below: _____

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(This section to be completed by ZAED)

LAND USE DESIGNATIONS (LUD) AND OTHER ZONING INFORMATION:

STATE LAND USE DISTRICT(S) Urban
COMMUNITY PLAN DESIGNATION(S) Project District 6
COUNTY ZONING(S) Kihei Research + Technology Park
OTHER DESIGNATION(S)/COMMENTS N/A

Yes No
(SMA) SPECIAL
MANAGEMENT
AREA

Yes No
(PH) PLANNED
DEVELOPMENT

Yes No
(PD) PROJECT
DISTRICT

Yes No
See Additional Comments On Page Two

Yes No
See The Attached Land Use Designation Map

FLOOD INFORMATION:

FLOOD HAZARD AREA ZONE(S) X For Flood Zone AO, FLOOD DEPTH N/A
BASE FLOOD ELEVATION(S) N/A feet mean sea level, Local Tidal Datum.

- *FLOODWAY Yes No *FLOOD DEVELOPMENT PERMIT REQUIRED Yes No
- * For flood hazard area zones X or XS, a flood development permit would be required if any work is done in any drainage facility or stream area that would reduce the capacity of the drainage facility, river, or stream, or adversely affect downstream property.
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 Consistent, with a Department of Public Works / Planning unilateral agreement.
 Not Consistent. Comments: _____

** All proposed subdivisions will be further reviewed during the subdivision application process to verify consistency, unilateral agreement requirements, and the conditions associated with a unilateral agreement [Section 18.04.030(D), Maui County Code].

REVIEWED & CONFIRMED BY:
Aaron Shinmoto (Signature) 12/19/11 (Date)
For: AARON SHINMOTO, Planning Program Administrator, Zoning Administration and Enforcement Division

DEC 15 2011

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ZONING AND FLOOD CONFIRMATION FORM

(This section to be completed by the Applicant)

APPLICANT NAME Maui R&T Partners, LLC. (Brett Davis, Planner) TELEPHONE 808-270-1561
PROJECT NAME Maui Research and Technology Park E-MAIL bdavis@chpmaui.com
PROPERTY ADDRESS Lipoa Parkway mauka of Piilani Highway, Kihei, Maui, HI TAX MAP KEY (2) 2-2-002:054 Por.

Yes No Will this Zoning & Flood Confirmation Form be used with a Subdivision Application?
If "Yes", answer questions A and B below:
A) Will it be processed under one of the consistency exemptions of Section 18.04.030(B), MCC? Yes No
If "Yes", which exemption? _____
B) Provide the purpose of subdivision and the proposed land uses below: _____

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2) If this will be used with a subdivision application AND if the zoning information for the subject property contains multiple State Land Use Districts, Community Plan Designations, or County Zoning, a signed and dated Land Use Designations (LUD) Map, prepared by a licensed surveyor showing all the various districts, designations, zonings, and any subdistricts, shall be submitted for review and approval.
3) If this will be used with a subdivision application AND if there are multiple State Land Use District designations, the applicant shall procure a District Boundary Interpretation from the State Land Use Commission.

(This section to be completed by ZAED)

LAND USE DESIGNATIONS (LUD) AND OTHER ZONING INFORMATION:

STATE LAND USE DISTRICT(S) Ag, Agricultural & Urban Open Space
COMMUNITY PLAN DESIGNATION(S) Ag, Agricultural, RDC-Khu R&T, Public/Quasi Public
COUNTY ZONING(S) Ag, Agricultural & Open Space
OTHER DESIGNATION(S)/COMMENTS Applicant needs to confirm SLL with State

Yes No (SMA) SPECIAL MANAGEMENT AREA
 Yes No (PH) PLANNED DEVELOPMENT
 Yes No (PD) PROJECT DISTRICT CPD

Yes No See Additional Comments On Page Two
 Yes No See The Attached Land Use Designation Map

FLOOD INFORMATION:

FLOOD HAZARD AREA ZONE(S) X For Flood Zone AO, FLOOD DEPTH _____
BASE FLOOD ELEVATION(S) N/A feet mean sea level, Local Tidal Datum.
*FLOODWAY Yes No *FLOOD DEVELOPMENT PERMIT REQUIRED Yes No

* For flood hazard area zones X or XS, a flood development permit would be required if any work is done in any drainage facility or stream area that would reduce the capacity of the drainage facility, river, or stream, or adversely affect downstream property.
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SUBDIVISION CONSISTENCY:

N/A (Not Applicable)

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Consistent, with a Department of Public Works / Planning unilateral agreement.

Not Consistent. Comments: _____

(Signature)
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** All proposed subdivisions will be further reviewed during the subdivision application process to verify consistency, unilateral agreement requirements, and the conditions associated with a unilateral agreement [Section 18.04.030(D), Maui County Code].

REVIEWED & CONFIRMED BY:

[Signature]

12/16/11

For: AARON SHINMOTO, Planning Program Administrator, Zoning Administration and Enforcement Division

Chapter 2(c)
*General Submittal
Requirements*

GENERAL SUBMITTAL REQUIREMENTS

1. Application Form (original + 1 copy)
2. Documents which identify the owner of the subject parcel of land.
3. If the applicant is not the owner of the subject parcel, then a notarized written authorization for the application by the owner shall be included. Said authorization shall include the owner's name, address and telephone number.
4. Agent's name, address, and telephone numbers, if applicable.
5. Location Map identifying the site, adjacent roadways and identifying landmarks (8 1/2" x 11" format.)
6. List of owners and lessees of record of real property located within a 500-foot radius of the subject parcel. The list shall be compiled from the most current list available at the Real Property Tax Division of the Department of Finance at the time of filing of the application with Director of Planning.

This list shall include the names and addresses of each owner and recorded lessees by tax map key. A map drawn to scale which clearly identifies the 500-foot boundary surrounding the subject parcel and the parcels within the boundary shall be included.

7. A report addressing the following (Original + 1 copy)
 - a. Policies and objectives of the General Plan; the provisions of the community plan applicable to the application; the provisions of the applicable district; and an analysis of the extent to which the application, if granted, conforms to these provisions, objectives and provisions.
 - b. Detailed land use history of the parcel which includes, but is not limited to former and existing State and County land use designations, violations and uses.
 - c. Preliminary archaeological and historical data and comments from the Department of Land and Natural Resources and the Office of Hawaiian Affairs of the State of Hawaii. If applicable, a preservation/mitigation plan which has been reviewed and approved by the Department of Land and Natural Resources and the Office of Hawaiian Affairs.

- d. Analysis of the secondary impacts of the proposed use on surrounding uses which includes, but is not limited to increases in property value, property, housing, community services and facility needs, secondary jobs and employment generated and compatibility with surrounding uses. If applicable, affordable housing program and comments from the Department of Housing and Human Concerns of the County and other mitigation plans and comments from the respective governmental and community service agencies.
- e. Traffic impact analysis and, if applicable, a traffic master plan which includes, but is not limited to comments from the Department of Transportation of the State of Hawaii and Department of Public Works and Environmental Management of the County.
- f. If applicable, an assessment of the impact which the proposed use may have on agricultural use of the parcel which includes, but is not limited to a feasibility analysis of potential agricultural uses suited to the site and written comments from the Department of Agriculture of the State of Hawaii and the U.S. Soil Conservation Service.
- g. Water source, supply and distribution system analysis which includes, but is not limited to methods of irrigation existing on the parcel and proposed for the application, location and use of groundwater and nonpotable water sources. If applicable, a water master plan which includes, but is not limited to comments from the Department of Land and Natural Resources of the State of Hawaii and Departments of Public Works and Environmental Management and Water Supply of the County.
- h. Sewage disposal analysis, a description of a proposed method of sewage disposal and comments, if applicable, from the Departments of Health and Land and Natural Resources of the State of Hawaii and the Departments of Public Works and Environmental Management and Water Supply of the County.
- i. Solid waste disposal analysis, a description of a proposed method of solid waste disposal and comments, if applicable from the Departments of Health and Land and Natural Resources of the State of Hawaii and the Departments of Public Works and Environmental Management and Water Supply of the County.
- j. Identification of environmentally sensitive areas, habitats and botanical features which include, but are not limited to wetlands, streams, rock outcroppings, endangered plants and animals and exceptional trees. If applicable, baseline study and preservation/mitigation plan and comments, if applicable, from the Department of Land and Natural Resources of the State of Hawaii, the U.S. Fish and Wildlife Service and the U.S. Army Corps of Engineers.
- k. Identification of the topographical and drainage patterns

existing on the subject parcel and any proposed alterations to these patterns.

- l. Identification of all meetings held between the applicant and any community or residential group which may be impacted by the applicant's request, the issues raised by these meetings and any measures proposed by the applicant to deal with or to mitigate these issues.
 - m. Development Schedule.
 - n. Operations and management of the proposed use which includes but is not limited to number of employees, proposed employee housing plan, hours of operation, fees charged to residents and visitors and provisions for off-site parking.
 - o. Identification of traditional beach and mountain access trails and additional trails which may be required for public access to the beaches and mountains and, if applicable, preservation/mitigation plan and comments from the Department of Land and Natural Resources and the Office of Hawaiian Affairs.
 - p. Identification and assessment of chemicals and fertilizers used including, but not limited to detailing effects upon surface, underground and marine water resources and neighboring properties and surrounding flora and fauna. If applicable, a mitigation plan and maintenance program and schedule and comments from the Departments of Health and Land and Natural Resources of the State of Hawaii, the U.S. Fish and Wildlife Service and the U.S. Environmental Protection Agency.
8. Photographs of the subject site, existing structures and surrounding area which are dated.
9. Schematic Site Development Plans, if applicable, drawn to scale, which identify the following (rendered copy and 1 blueprint set):
- a. Property lines and easements with its dimensions and area calculations;
 - b. Location, size, spacing, setbacks and dimensions of all existing and proposed building, structures, improvements, and uses;
 - c. Existing and proposed building elevations, sections, floor plans, and site sections which clearly define the character of the development;
 - d. Topographic information showing existing features and conditions and proposed grading;
 - e. Existing and proposed landscaping which depicts open spaces, plantings and trees;

- f. Existing and proposed roadways and accesses to the project and parking layout with dimensions; and
- g. Shoreline, shoreline setback lines, stream and other setback lines.

NOTE: For Project Master Plan Review, the development plans shall also comply with Maui County Code, Section 19.510.080.C.

- ✓ 10. Any other information as may be required by Director of Planning or the appropriate planning commissions of the County.
- ✓ 11. **Non-refundable filing fee** payable to the *County of Maui, Director of Finance*.
 - a. Change in Zoning (**see Fee Schedule, Table A**)
 - b. County Special Use Permit (**see Fee Schedule, Table A**)
 - c. Project Master Plan Review (**see Fee Schedule, Table A**)
- ✓ 12. Notice of Filing of Application (Attachment A)
- ✓ 13. Notarized Affidavit of Mailing of Notice and Application (Attachment B)
- ✓ 14. For Change in Zoning, the following additional information is required:
 - a. Legal metes and bounds description of the subject parcel;
and
 - b. Mylar map drawn to scale (8 1/2" x 14" format) of the subject parcel (Attachment C).

An original plus one copy of Items 1-10 shall be submitted for review by the Planning Department for suitability for transmittal to public agencies for review and comment. Upon deeming the application suitable for agency review, the Planning Department will contact the applicant to request the additional number of application packets needed for agency review.

Chapter 2(d)
*Notice of Filing of
Application and
Location Map*

ATTACHMENT A

TO:

DATE: June 15, 2012

NOTICE OF FILING OF APPLICATION

Check appropriate line: AG & Kihei Research & Tech Park to Maui Research & Technology Park
x CHANGE IN ZONING (From COUNTY SPECIAL USE PROJECT MASTER PLAN)

Please be advised that the undersigned will be applying to the Department of Planning of the County of Maui for the above-referenced application(s) for the following parcel(s):

- 1. Tax map Key No.: See attached list (NOTE: Please attach an 8 1/2" x 14" location map)
2. Location (Street Address): The MRTP is accessed by Lipoa Parkway, mauka of Piilani Highway
3. Existing Land Use Designations:
a. State Land Use District: See attached list
b. Community Plan Designation: See attached list
c. County Zoning: See attached list
4. Description of the Existing Uses on Property: Maui Research and Technology Park
5. Description of the Proposed Uses on Property: Expansion of the existing MRTP with residential, commercial and knowledge based industries pursuant to an update of the Master Plan as described in this report.

By: Maui R&T Partners, LLC. (Mr. Michael Rosenfeld) Chris Hart and Partners, Inc. (Contact: Mr. Michael Summers)

(Owner/Applicant) a Delaware limited liability company, By Maui Tech Associates, LLC a Delaware limited liability company, Its Administrative Member
(Signature) Michael Rosenfeld, Its Manager
1999 Avenue of the Stars, Suite 2850

(Agent)
(Signature) Michael J. Summers
115 N. Market St.

Los Angeles, CA 90067
(Address)
310-824-2200
(Telephone)

Wailuku, HI 96793
(Address)
808-242-1955
(Telephone)

Parcels subject to CIZ Owned by Maui R&T Partners, LLC. and others

| Parcel Type | TMK | Acreage | STATE | EXISTING COMMUNITY PLAN | EXISTING ZONING | PROPOSED ZONING |
|-------------|-------------------|---------|-------|-------------------------|---|--|
| LOT | (2)2-2-24:02 | 5.145 | Urban | Project District 6 | Kihei Research & Technology Park District | Maui Research & Technology Park District |
| LOT | (2)2-2-24:03 | 2.781 | Urban | Project District 6 | Kihei Research & Technology Park District | Maui Research & Technology Park District |
| LOT | (2)2-2-24:04 | 2.676 | Urban | Project District 6 | Kihei Research & Technology Park District | Maui Research & Technology Park District |
| LOT | (2)2-2-24:05 | 2.435 | Urban | Project District 6 | Kihei Research & Technology Park District | Maui Research & Technology Park District |
| LOT | (2)2-2-24:06 | 2.743 | Urban | Project District 6 | Kihei Research & Technology Park District | Maui Research & Technology Park District |
| LOT | (2)2-2-24:07 | 2.815 | Urban | Project District 6 | Kihei Research & Technology Park District | Maui Research & Technology Park District |
| LOT | (2)2-2-24:08 | 2.342 | Urban | Project District 6 | Kihei Research & Technology Park District | Maui Research & Technology Park District |
| ROADWAY | (2)2-2-24:09 | 5.563 | Urban | Project District 6 | Kihei Research & Technology Park District | Maui Research & Technology Park District |
| ROADWAY | (2)2-2-24:09 por. | 0.456 | Urban | Project District 6 | Kihei Research & Technology Park District | Maui Research & Technology Park District |
| ROADWAY | (2)2-2-24:09 por. | 0.473 | Urban | Project District 6 | Kihei Research & Technology Park District | Maui Research & Technology Park District |
| ROADWAY | (2)2-2-24:09 por. | 0.449 | Urban | Project District 6 | Kihei Research & Technology Park District | Maui Research & Technology Park District |
| LOT | (2)2-2-24:14 | 58.288 | Urban | Project District 6 | Kihei Research & Technology Park District | Maui Research & Technology Park District |
| LOT | (2)2-2-24:15 | 26.694 | Urban | Project District 6 | Kihei Research & Technology Park District | Maui Research & Technology Park District |
| LOT | (2)2-2-24:16 | 90.189 | AG | Project District 6 | AG | Maui Research & Technology Park District |
| LOT | (2)2-2-24:17 | 39.018 | AG | PQP | AG | Maui Research & Technology Park District |
| ROADWAY | (2)2-2-24:18 | 7.855 | Urban | AG | AG | Maui Research & Technology Park District |
| DRAINAGEWAY | (2) 2-2-24:32 | 0.167 | Urban | Project District 6 | Kihei Research & Technology Park District | Maui Research & Technology Park District |
| LOT | (2)2-2-24:34 | 2.8 | Urban | Project District 6 | Kihei Research & Technology Park District | Maui Research & Technology Park District |
| BASIN | (2) 2-2-24:36 | 5.791 | Urban | Project District 6 | Kihei Research & Technology Park District | Maui Research & Technology Park District |
| LOT | (2) 2-2-24:37 | 2.338 | Urban | Project District 6 | Kihei Research & Technology Park District | Maui Research & Technology Park District |
| LOT | (2)2-2-24:38 | 2.304 | Urban | Project District 6 | Kihei Research & Technology Park District | Maui Research & Technology Park District |
| LOT | (2)2-2-24:39 | 2.297 | Urban | Project District 6 | Kihei Research & Technology Park District | Maui Research & Technology Park District |
| LOT | (2)2-2-24:40 | 2.293 | Urban | Project District 6 | Kihei Research & Technology Park District | Maui Research & Technology Park District |
| LOT | (2)2-2-24:41 | 3.027 | Urban | Project District 6 | Kihei Research & Technology Park District | Maui Research & Technology Park District |
| LOT | (2)2-2-24:42 | 2.900 | Urban | Project District 6 | Kihei Research & Technology Park District | Maui Research & Technology Park District |
| LOT | (2)2-2-24:43 | 2.041 | Urban | Project District 6 | Kihei Research & Technology Park District | Maui Research & Technology Park District |
| LOT | (2)2-2-24:44 | 2.101 | Urban | Project District 6 | Kihei Research & Technology Park District | Maui Research & Technology Park District |
| ROADWAY | (2)2-2-24:45 | 1.772 | Urban | Project District 6 | Kihei Research & Technology Park District | Maui Research & Technology Park District |
| ROADWAY | (2)2-2-24:45 por. | 0.479 | Urban | Project District 6 | Kihei Research & Technology Park District | Maui Research & Technology Park District |
| ROADWAY | (2)2-2-24:45 por. | 1.204 | Urban | Project District 6 | Kihei Research & Technology Park District | Maui Research & Technology Park District |
| ROADWAY | (2)2-2-24:46 | 0.730 | Urban | Project District 6 | Kihei Research & Technology Park District | Maui Research & Technology Park District |

ATTACHMENT A

TO:

DATE: June 15, 2012

NOTICE OF FILING OF APPLICATION

Check appropriate Line: Maui Research & Technology Park
x CHANGE IN ZONING (From Agricultural to
COUNTY SPECIAL USE
PROJECT MASTER PLAN

Please be advised that the undersigned will be applying to the Department of Planning of the County of Maui for the above-referenced application(s) for the following parcel(s):

- 1. Tax map Key No.: (2) 2-2-002:054 (por.)
2. Location (Street Address): The MRTTP is accessed by Lipoa Parkway, mauka of Piilani Highway
3. Existing Land Use Designations:
a. State Land Use District: Agricultural
b. Community Plan Designation: Project District 6
c. County Zoning: Agricultural
4. Description of the Existing Uses on Property: Agricultural grazing land
5. Description of the Proposed Uses on Property: Expansion of the existing MRTTP with residential, commercial and knowledge based industries pursuant to an update of the Master Plan as described in this report.

By: Haleakala Ranch
(Owner/Applicant)
Signature
529 Kealaloa Avenue
Makawao, HI 96768
(Address)
808-572-1500
(Telephone)

Chris Hart and Partners, Inc. (Contact: Mr. Michael Summers)
(Agent)
Signature
115 N. Market St.
Wailuku, HI 96793
(Address)
808-242-1955
(Telephone)

Parcels subject to CIZ Owned by Haleakala Ranch

| <u>TMK</u> | <u>Acreage</u> | <u>STATE</u> | <u>COMMUNITY PLAN</u> | <u>EXISTING ZONING</u> | <u>PROPOSED ZONING</u> |
|---------------------|----------------|--------------|-----------------------|------------------------|--|
| (2)2-2-02: 54 (por) | 123.843 | AG | Project District 6 | AG | Maui Research & Technology Park District |

Maalaea Bay

Kalaepohaku

Kihei

Project Site

© 2012 Google
Image © 2012 DigitalGlobe
Image © 2012 GeoEye
Data SOEST/UHM

Location Map

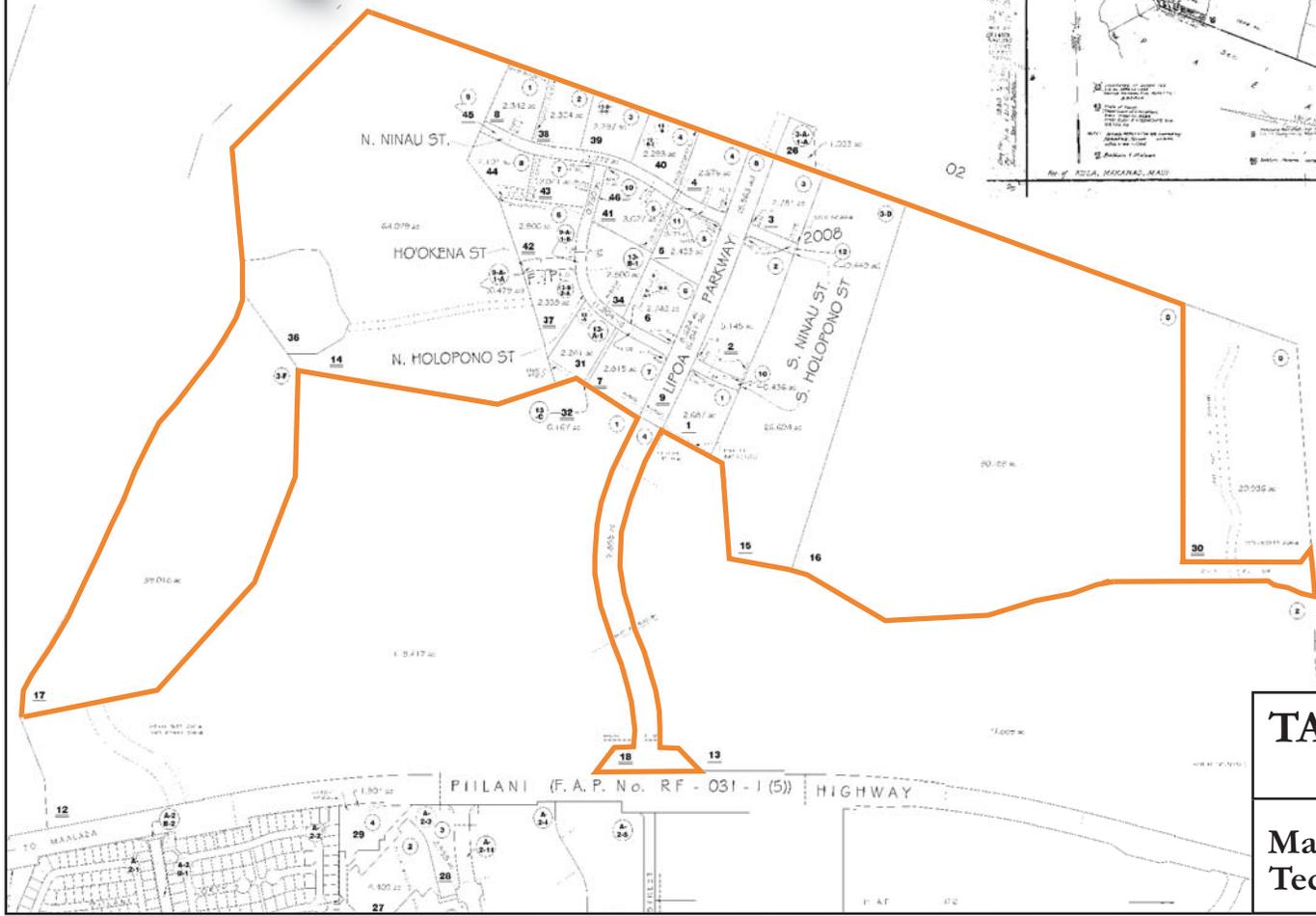
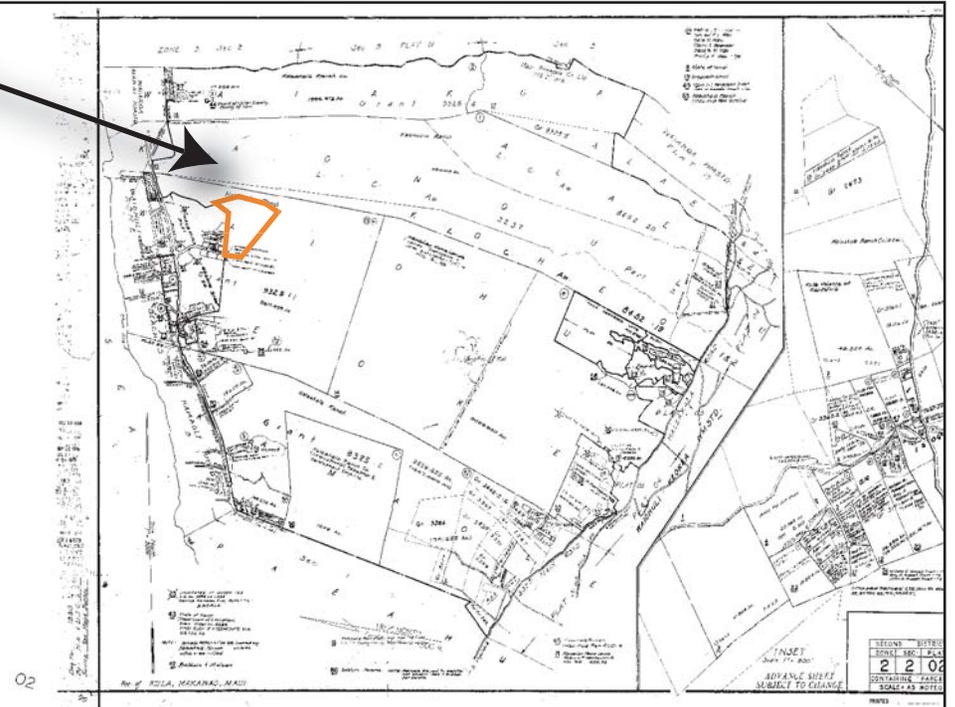
Maui Research &
Technology Park



Project Site

Parcel 54 (por.)

Parcels 1 - 9, 14 - 18, 31, 32, 34-46



TAX MAP KEY

Not to Scale

Maui Research & Technology Park



Chapter 2(e)
*Notarized Affidavit of
Mailing of Notice of
Application*

NOTARIZED AFFIDAVITS
SUBMITTED UNDER
SEPARATE COVER

Chapter 2(f)
*Notice of Public
Hearing and Location
Map*

**NOTICE OF PUBLIC HEARING FORM
TO BE SUBMITTED AT THE TIME
OF SCHEDULING BY PLANNING DEPARTMENT**

Chapter 2(g)
*Notarized Affidavit of
Mailing of Notice of
Public Hearing*

**NOTARIZED AFFIDAVITS
TO BE SUBMITTED UNDER
SEPARATE COVER**

Chapter 2(h)
*Mylar Map and Metes
& Bounds Description*

MYLAR MAP
SUBMITTED UNDER SEPARATE COVER

Exhibit A

221

Property Description

| <u>Lot Description</u> | <u>Acreage</u> | <u>Tax Map Key Number</u> |
|--|----------------|---------------------------|
| Lot 3-D, Haleakala Greens Subd. | 26.694 ac. | (2) 2-2-24-15 |
| Lot 3-E-1, Haleakala Greens Subd. | 90.189 ac. | (2) 2-2-24-16 |
| Lot 3-C-1, Haleakala Greens Subd. | 58.228 ac. | (2) 2-2-24-14 (por.) |
| Lot 3-F, Haleakala Greens Subd. | 39.018 ac. | (2) 2-2-24-17 |
| Lot 4 (Roadway Lot), Haleakala Greens Subdivision | 7.855 ac. | (2) 2-2-24-18 |

(2) 2-2-024-009.

Being all of the property conveyed by the following:

Deed

Grantor: Maui Economic Development Board, Inc., a Hawaii non-profit corporation
Grantee: Maui R & T Partners, a Hawaii limited partnership
Dated: August 31, 1989
Recorded: September 14, 1989, in the Bureau of Conveyances of the State of Hawaii, Book 23639, Page 642, (as to an undivided 30% interest) (besides other lands).

Deed

Grantor: Maui Land & Pineapple Co., Inc., a Hawaii corporation
Grantee: Maui R & T Partners, a Hawaii limited partnership
Dated: August 31, 1989
Recorded: September 14, 1989, in the Bureau of Conveyances of the State of Hawaii, Book 23639, Page 651, (as to an undivided 23.876% interest) (besides other lands).

Warranty Deed

Grantor: Haleakala Properties, Inc., a Hawaii corporation
Grantee: Maui R & T Partners, a Hawaii limited partnership
Dated: July 7, 1989
Recorded: September 14, 1989, in the Bureau of Conveyances of the State of Hawaii, Book 23639, Page 660, (as to an undivided 46.124% interest) (besides other lands).

Warranty Deed

Grantor: Maui R & T Partners, a Hawaii limited partnership
Grantee: John M. Kean, a married man, as to an undivided twelve percent (12%) interest
Dated: June 9, 2006
Recorded: June 16, 2006, in the Bureau of Conveyances of the State of Hawaii, Document No. 2006-110619, (As to Item II only).

Tax Map Key: 2-2-024-004; 2-2-024-008; 2-2-024-009

- Lot 3-D = 2-2-24-015 map
- Lot 3-E-1 = 2-2-24-016 map
- Lot 3-C-1 = 2-2-24-14 map
✓ Lot 3-F = 2-2-24-017 map
✓ Lot 4 Roadway = 2-2-24-018

**Haleakala Greens Subdivision
Description of Lot 3-E-1**

Land situated on the easterly side of Piilani Highway F.A.P. No. RF-031-1(5) at Waiohuli-Keokea (Kihei), Maui, Hawaii

Being a portion of Grant 9325 Apana 1 to Haleakala Ranch Company

Beginning at a point at the southeasterly corner of this lot, the coordinates of said point of beginning referred to Government Survey Triangulation Station "PUU-O-KALI" being: 3,913.10 feet North and 17,237.89 feet West and running by azimuths measured clockwise from True South:

1. 80° 58' 10" 1,410.00 feet along the remainder of Grant 9325 Apana 1 to Haleakala Ranch Company, being also along Lot 3-E-2 of Haleakala Greens Subdivision to a point;
2. 350° 30' 699.93 feet along same to a point;
3. 298° 30' 84.00 feet along same to a point;
4. 76° 15' 249.57 feet along the remainder of Grant 9325 Apana 1 to Haleakala Ranch Company, being also along Lot 3-A-1-B of Haleakala Greens Subdivision to a point;
5. 188° 00' 275.00 feet along the remainder of Grant 9325 Apana 1 to Haleakala Ranch Company, being also along Lot 2 of Haleakala Greens Subdivision to a point;
6. 170° 30' 920.00 feet along same to a point;
7. 156° 07' 760.00 feet along same to a point;
8. 168° 25' 590.00 feet along same to a point;
9. 198° 45' 515.00 feet along same to a point;
10. 181° 25' 106.53 feet along same to a point;

11. 279° 07' 30" 2,117.02 feet along the remainder of Grant 9325 Apana 1 to Haleakala Ranch Company, being also along Lot 3-D of Haleakala Greens Subdivision to a point;
12. 9° 07' 30" 1,721.79 feet along the remainder of Grant 9325 Apana 1 to Haleakala Ranch Company, being also along Lot 3-A-1-B of Haleakala Greens Subdivision to the point of beginning and containing an Area of 90.189 Acres.

TOGETHER WITH, the following:

1. An existing Roadway and Utility Easement "F" over and across a portion of Grant 9325 Apana 1 to Haleakala Ranch Company, being also over and across a portion of Lot 3-A-1-B of Haleakala Greens Subdivision.

SUBJECT, HOWEVER to the following:

1. A Drainage Easement "U" in favor of Lot 3-E-2 of Haleakala Greens Subdivision and being more particularly described as follows:

Beginning at a point at the southeasterly corner of this easement, the azimuth and distance from the northwesterly corner of Lot 3-E-2 of Haleakala Greens Subdivision being: 350° 30' 314.67 feet, the coordinates of said point of beginning referred to Government Survey Triangulation Station "PUU-O-KALI" being 3,381.43 feet North and 18,578.47 feet West and running by azimuths measure clockwise from True South:

1. 68° 00' 102.43 feet over and across a portion of Grant 9325 Apana 1 to Haleakala Ranch Company, being also over and across a portion of Lot 3-E-1 of Haleakala Greens Subdivision;
2. 170° 30' 51.21 feet along the remainder of Grant 9325 Apana 1 to Haleakala Ranch Company, being also along Lot 2 of Haleakala Greens Subdivision;

3. 248° 00' 102.43 feet over and across a portion of Grant 9325 Apana 1 to Haleakala Ranch Company, being also over and across a portion of Lot 3-E-1 of Haleakala Greens Subdivision;
4. 350° 30' 51.21 feet along the remainder of Grant 9325 Apana 1 to Haleakala Ranch Company, being also along Lot 3-E-2 of Haleakala Greens Subdivision to the point of beginning and containing an Area of 5,121 square feet, more or less.

Subject, However, to the following:

1. A portion of existing Utility Easement "J" in favor of Maui R & T Partners.
2. A portion of Roadway and Utility Easement "P" in favor of Lot 3-E-2 of Haleakala Greens Subdivision.
2. A Roadway and Utility Easement "P" in favor of Lot 3-E-2 of Haleakala Greens Subdivision and being more particularly described as follows:

Beginning at a point at the southwesterly corner of this easement, being also the southwesterly corner of Lot 3-E-1 and the southeasterly corner of Lot 2 of Haleakala Greens Subdivision, the coordinates of said point of beginning referred to Government Survey Triangulation Station "PUU-O-KALI" being 2,902.06 feet North and 18,683.49 feet West and running by azimuths measured clockwise from True South:

1. 188° 00' 275.00 feet along the remainder of Grant 9325 Apana 1 to Haleakala Ranch Company, being also along Lot 2 of Haleakala Greens Subdivision;
2. 170° 30' 508.69 feet along same;
3. 260° 58' 10" 100.00 feet over and across a portion of Grant 9325 Apana 1 to Haleakala Ranch Company, being also over and across a portion of Lot 3-E-1 of Haleakala Greens Subdivision;

-
4. 350° 30' 699.93 feet along the remainder of Grant 9325 Apana 1 to Haleakala Ranch Company, being also along Lot 3-E-2 of Haleakala Greens Subdivision;
 5. 298° 30' 84.00 feet along same;
 6. 76° 15' 249.57 feet along the remainder of Grant 9325 Apana 1 to Haleakala Ranch Company, being also along Lot 3-A-1-B of Haleakala Greens Subdivision to the point of beginning and containing an Area of 88,531 square feet, more or less.
3. An existing Roadway and Utility Easement "J" in favor of Maui R & T Partners.
 4. A portion of an existing Electrical and Telephone Easement 4 in favor of Maui Electric Company, Ltd. and GTE Hawaiian Telephone Company, Inc.

V:\Projdata\04PROJ\04114\Survey\Desc. of Lot 3-E-1.wpd

**Haleakala Greens Subdivision
Description of Lot 3-F**

Land situated on the easterly side of Piilani Highway, F.A.P.
No. RF-031-1(5) at Waiohuli-Keokea (Kihei), Maui, Hawaii

Being portions of Grant 9325 Apana 1 to Haleakala Ranch Company

Beginning at a point at the northwesterly corner of this lot,
being also the northeasterly corner of Lot 1 of Haleakala Greens
Subdivision, the coordinates of said point of beginning referred to
Government Survey Triangulation Station "PUU-O-KALI", being 10,267.07
feet North and 20,573.46 feet West and running by azimuths measured
clockwise from True South:

1. 266' 30' 150.00 feet along the remainder of Grant
9325 Apana 1 to Haleakala Ranch
Company, being also along Lot
3-A of Haleakala Greens
Subdivision to a point;
2. 293' 00' 410.00 feet along same to a point;
3. 291' 30' 350.00 feet along same to a point;
4. 286' 00' 850.00 feet along same to a point;
5. 301' 30' 650.00 feet along same to a point;
6. 283' 15' 270.00 feet along same to a point;
7. 42' 37' 15" 518.60 feet along the remainder of Grant
9325 Apana 1 to Haleakala Ranch
Company, being also along Lot
3-C of Haleakala Greens
Subdivision to a point;
8. 83' 00' 585.00 feet along the remainder of Grant
9325 Apana 1 to Haleakala Ranch
Company, being also along Lot 1
of Haleakala Greens Subdivision
to a point;

9. 102' 25' 640.00 feet along same to a point;
10. 125' 30' 800.00 feet along same to a point;
11. 160' 00' 815.00 feet along same to the point of
beginning and containing an
Area of 39.018 Acres.

TOGETHER WITH THE FOLLOWING:

1. A Existing Access and Utility Easement "A" (100 feet wide)



Reed M. Ariyoshi 4/12/00

Licensed Professional Land Surveyor
Certificate No. 6597

Haleakala Greens Subdivision
Description of Lot 4
(Roadway Lot)

Land situated on the easterly side of Piilani Highway, F.A.P.
No. RF-031-1(5) at Waiohuli-Keokea (Kihei), Maui, Hawaii

Being a portion of Land Patent Grant 9325 Apana 1 to Haleakala
Ranch Company

Beginning at a point at the southwest corner of this lot, the
coordinates of said point of beginning referred to Government Survey
Triangulation Station "PUU-O-KALI", being 6,291.97 feet North and
20,216.35 feet West and running by azimuths measured clockwise from
True South:

1. 170° 36' 30" 458.05 feet along the easterly side of
Piilani Highway, F.A.P. No.
RF-031-1(5) to a point;
2. 80° 36' 30" 5.00 feet along same to a point;
3. 170° 36' 30" 156.95 feet along same to a point;
4. 305° 36' 30" 190.92 feet along Lot 1 of Haleakala Greens
Subdivision to a point;
5. 350° 36' 30" 100.00 feet along same to a point;
6. 260° 36' 30" 37.58 feet along same to a point;
7. Thence along same on a curve to the left having a radius of
1,225.00 feet, the chord
azimuth and distance being:
247° 30' 45" 555.12 feet to a
point;
8. Thence along same on a curve to the right having a radius of
1,071.94 feet, the chord
azimuth and distance being:
261° 27' 30" 974.69 feet to a
point;
9. 288° 30' 287.03 feet along same to a point;
10. 18° 30' 150.00 feet along Lot 3 of Haleakala Greens
Subdivision to a point;

11. 108° 30' 287.03 feet along Lot 2 of Haleakala Greens
Subdivision to a point;
12. Thence along same on a curve to the left having a radius of
921.94 feet, the chord azimuth
and distance being:
81° 27' 30" 838.30 feet to a
point;
13. Thence along same on a curve to the right having a radius of
1,375.00 feet, the chord
azimuth and distance being:
67° 30' 45" 623.10 feet to a
point;
14. 80° 36' 30" 37.58 feet along same to a point;
15. 350° 36' 30" 100.00 feet along same to a point;
16. 35° 36' 30" 183.85 feet along same to the point of
beginning and containing an
area of 7.855 Acres.

SUBJECT, HOWEVER, to vehicular access restrictions from Piilani Highway, F.A.P. No. RF-031-1(5), along Course Numbers 1, 2 and 3 of the above described lot.



Warren A. Suzuki

Registered Land Surveyor
Certificate No. 5073

Chapter 3
*LAND OWNERSHIP
DOCUMENTATION*



R-403

STATE OF HAWAII
BUREAU OF CONVEYANCES
RECORDED
JUN 27, 2003 08:01 AM

Doc No(s) 2003-131256

/s/ CARL T. WATANABE
REGISTRAR OF CONVEYANCES

CONVEYANCE TAX: \$450.00

20 1/1 26

LAND COURT SYSTEM

REGULAR SYSTEM

Return by Mail Pickup To:Pacific Rim Land Inc
PO Box 598
Wenatchee WA 98807TG: 200334202-S
TGE: AB 203 0554
Tamara Cabanilla-Aricayos

R/S

TITLE OF DOCUMENT:

WARRANTY DEED

PARTIES TO DOCUMENT:

GRANTOR: HALEAKALA RANCH COMPANY, a Hawaii corporation

GRANTEE: PACIFIC RIM LAND, INC., a Washington corporation
P. O. Box 598
Wenatchee, Washington 98807

TAX MAP KEY(S): Maui 2-2-002-054 and 069

(This document consists of 14 pages.)

0.54013% Interest Deed

WARRANTY DEED

KNOW ALL MEN BY THESE PRESENTS:

That on this 24th day of JUNE, 2003
HALEAKALA RANCH COMPANY, a Hawaii corporation, hereinafter called the "Grantor", for and in consideration of the sum of TEN AND NO/100 DOLLARS (\$10.00) and other good and valuable consideration to the Grantor paid by PACIFIC RIM LAND, INC., a Washington corporation, whose address is P. O. Box 598, Wenatchee, Washington 98807, hereinafter called the "Grantee", the receipt whereof is hereby acknowledged, does hereby grant, bargain, sell and convey unto the Grantee an **undivided 0.54013% interest** in that certain real property more particularly described in Exhibit A attached hereto and made a part hereof, subject to the encumbrances noted therein.

TOGETHER WITH all the rights, easements, privileges and appurtenances thereunto belonging or appertaining.

TO HAVE AND TO HOLD the same unto the Grantee, in fee simple, forever, as tenant in common with Grantor, which retains ownership of the remaining undivided 99.45987% interest in said real property.

AND the Grantor does hereby covenant with the Grantee that the Grantor is lawfully seised in fee simple of said granted premises and that the said premises are free and clear of all encumbrances except as aforesaid, and except for assessments for real property taxes not yet by law required to be paid. And the Grantor further covenants and agrees that the Grantor has good right to sell and convey the said premises in the manner aforesaid; that the Grantor will WARRANT AND DEFEND the same unto the Grantee against the lawful claims and demands of all persons, except as aforesaid. IT IS MUTUALLY AGREED that the terms "Grantor" and "Grantee", as and when used hereinabove or hereinbelow shall mean and include the masculine or feminine, the singular or plural number, individuals, associations, trustees, corporations or partnerships, and their and each of their respective successors in interest, heirs, executors, personal representatives, administrators and permitted assigns, according to the context thereof, and that if these presents shall be signed by two or more grantors, or by two or more grantees, all covenants of such parties shall be and for all purposes deemed to be joint and several.

IN WITNESS WHEREOF, the Grantor has executed these presents as of the day and year first above written.

HALEAKALA RANCH COMPANY

By Willard J. Stuka
Name: WILLARD J. STUKA
Its PRESIDENT

By _____
Name:
Its

Grantor

STATE OF HAWAII)
) ss.
COUNTY OF MAUI)

On June 24, 2003, before me personally appeared Willard J. Stluke and _____, to me personally known/proved to me on the basis of satisfactory evidence, who, being by me duly sworn or affirmed, did say that they are the President, and the _____ of HALEAKALA RANCH COMPANY, respectively, and that such persons executed the foregoing instrument as the free act and deed of such persons, and if applicable in the capacity shown, having been duly authorized to execute such instrument in such capacity.

19

Lynn M. Sueda
Name: **Lynn M. Sueda**
Expiration Date: April 6, 2005
Notary Public, State of Hawaii
My commission expires: _____

EXHIBIT A

PARCEL ONE: All of that certain parcel of land (being portion(s) of the land(s) described in and covered by Land Patent Grant Number 9325, Apana 1 to Haleakala Ranch Company) situate, lying and being at Waiohuli-Keokea, Makawao, Kula, Island and County of Maui, State of Hawaii, being LOT 3-A-1-B of the "HALEAKALA GREENS SUBDIVISION", bearing Tax Key designation (2) 2-2-002-054, and containing an area of 2,610.499 acres, more or less.

Being a portion of the premises acquired by the HALEAKALA RANCH COMPANY by Land Patent Grant Number 9325 from the Governor of the Territory of Hawaii dated August 25, 1927.

Together with Drainage Easement "T" in favor of Lot 3-A-1-B of Haleakala Greens Subdivision and being more particularly described as per survey map prepared by Reed M. Ariyoshi, Licensed Professional Land Surveyor, dated April 6, 2000, revised June 28, 2000, September 21, 2000 and October 17, 2000, to-wit:

Beginning at a point at the northeasterly corner of this easement, the azimuth and distance from the northeasterly corner of Lot 3-E-2 and the southeasterly corner of Lot 3-E-1 of Haleakala Greens Subdivision being: 9° 07' 30" 289.00 feet, the coordinates of said point of beginning referred to Government Survey Triangulation Station "PUU-O-KALI", being 3,627.76 feet north and 17,283.72 feet west and running by azimuths measured clockwise from true South:

1. 9° 07' 30" 50.10 feet along Lot 3-A-1-B of Haleakala Greens Subdivision
2. 95° 30' 1.57 feet over and across a portion of Lot 3-E-2 of Haleakala Greens Subdivision;
3. Thence over and across same on a curve to the left having a radius of 175.00 feet, the chord azimuth and distance being:
 87° 45' 47.20 feet;
4. 80° 00' 65.27 feet over and across same;
5. Thence over and across same on a curve to the right having a radius of 175.00 feet, the chord azimuth and distance being:
 93° 30' 81.71 feet;
6. 107° 00' 112.34 feet over and across same;
7. Thence over and across same on a curve to the left having a radius of 175.00 feet, the chord azimuth and distance being:

- 91° 37' 30" 92.80 feet;
8. 76° 15' 518.86 feet over and across same;
9. Thence along same on a curve to the left having a radius of 75.00 feet, the chord azimuth and distance being:
- 60° 37' 30" 40.40 feet;
10. 45° 00' 27.24 feet over and across same;
11. Thence over and across same on a curve to the right having a radius of 175.00 feet, the chord azimuth and distance being:
- 72° 45' 162.97 feet;
12. 100° 30' 27.35 feet over and across same;
13. Thence over and across same on a curve to the left having a radius of 125.00 feet, the chord azimuth and distance being:
- 92° 45' 13.71 feet;
14. 85° 00' 75.27 feet over and across same;
15. Thence over and across same on a curve to the left having a radius of 75.00 feet, the chord azimuth and distance being:
- 76° 30' 22.17 feet;
16. 68° 00' 22.50 feet over and across same;
17. 170° 30' 51.21 feet along Lot 3-E-1 of Haleakala Greens Subdivision
18. 248° 00' 11.42 feet over and across a portion of Lot 3-E-2 of Haleakala Greens Subdivision;
19. Thence over and across same on a curve to the right having a radius of 125.00 feet, the chord azimuth and distance being:
- 256° 30' 36.95 feet;
20. 265° 00' 75.27 feet over and across same;

21. Thence over and across same on a curve to the right having a radius of 175.00 feet, the chord azimuth and distance being:
- 272° 45' 47.20 feet;
22. 280° 30' 27.35 feet over and across same;
23. Thence over and across same on a curve to the left having a radius of 125.00 feet, the chord azimuth and distance being:
- 252° 45' 116.40 feet;
24. 225° 00' 27.24 feet over and across same;
25. Thence over and across same on a curve to the right having a radius of 125.00 feet, the chord azimuth and distance being:
- 240° 37' 30" 67.34 feet;
26. 256° 15' 518.86 feet over and across same;
27. Thence over and across same on a curve to the right having a radius of 225.00 feet, the chord azimuth and distance being:
- 271° 37' 30" 119.31 feet;
28. 287° 00' 112.34 feet over and across same;
29. Thence over and across same on a curve to the left having a radius of 125.00 feet, the chord azimuth and distance being:
- 273° 30' 58.36 feet;
30. 260° 00' 65.27 feet over and across same;
31. Thence over and across same on a curve to the right having a radius of 225.00 feet, the chord azimuth and distance being:
- 267° 45' 60.68 feet;
32. 275° 30' 4.73 feet over and across same to the point of beginning and containing an area of 67,429 square feet more or less.

PARCEL TWO: All of that certain parcel of land (being portion(s) of the land(s) described in and covered by Land Patent Grant Number 9325, Apana 2 to Haleakala Ranch Company) situate, lying and being at Kama'ole, Kihei, Kula, Makawao,

County of Maui, State of Hawaii, being LOT B-1-A of "KAMAOLE-KIHEI WATER STORAGE RESERVOIR SUBDIVISION" bearing Tax Key designation (2) 2-2-002-069, and containing an area of 72.060 acres, more or less.

Being the a portion of the premises acquired by the HALEAKALA RANCH COMPANY by Land Patent Grant Number 9325 from the Governor of the Territory of Hawaii dated August 25, 1927.

SUBJECT, HOWEVER, as to PARCEL ONE and PARCEL TWO above, to the following:

1. As to PARCEL ONE above only:
 - a. Drainage Easement (711 square feet) as shown on Tax Map.
 - b. Waipuilani Gulch and Keokea Gulch as shown on Tax Map.
 - c. Restriction of abutter's rights of access into and from Piilani Highway, Federal Aid Project No. RF-031-1 (5), as shown on surveyor's map prepared by Reed M. Ariyoshi, Land Surveyor, with Warren S. Unemori Engineering, Inc., dated August 16, 1995, which restriction was imposed by the State of Hawaii by Final Order of Condemnation dated July 22, 1980, filed in the Circuit Court of the Second Circuit, State of Hawaii, Civil No. 3888, on July 23, 1980, recorded in the Bureau of Conveyances of the State of Hawaii in Liber 14909 at Page 417 on August 8, 1980.
 - d. Grant dated November 27, 1979, recorded in said Bureau in Liber 14518 at Page 297, in favor of County of Maui, granting a non-exclusive easement for waterline purposes over said Waterline Easement "3" and being more particularly described therein.
 - e. Grant dated November 27, 1979, recorded in said Bureau in Liber 14518 at Page 307, in favor of County of Maui, granting a non-exclusive easement for waterline purposes over said Waterline Easement "4" and being more particularly described therein.
 - f. Grant dated November 27, 1979, recorded in said Bureau in Liber 14518 at Page 318, in favor of County of Maui, granting the right in the nature of a non-exclusive easement for water pipeline purposes, over, under, across and through said Central Maui Water Transmission System Waterline Easement "5", being more particularly described therein.
 - g. Grant dated January 29, 1980, recorded in said Bureau in Liber 14545 at Page 361, in favor of Maui Electric Company, Limited and Hawaiian Telephone Company, now known as Verizon Hawaii Inc., granting a perpetual right and easement for pole and wire lines and underground power lines, etc., over, across, through and under said Easement(s) "B", "D" and "F" more particularly described therein.

h. Grant dated March 27, 1980, recorded in said Bureau in Liber 14641 at Page 522, in favor of Maui Electric Company, Limited, granting a perpetual right and easement for pole and wire lines and underground power lines, etc., over, across, through and under said Easement "16".

i. Terms, provisions, covenants, conditions and reservations contained in Unrecorded Development Agreement, dated November 2, 1984, but effective November 1, 1984, by Maui Economic Development Board, Inc., a Hawaii non-profit corporation, "Optionor" and Arroyo Development Corporation, a California corporation, and Joel R. Smolen, "Optionee".

Memorandum of Development Agreement of which is dated November 7, 1984, but effective November 1, 1984, recorded in said Bureau in Liber 18270 at Page 477.

Said Development Agreement was amended by unrecorded Amendment of Development Agreement dated January 18, 1985, but made effective November 1, 1984.

Memorandum of Development Agreement of said Unrecorded Development Agreement dated January 18, 1985, but effective November 1, 1984, recorded in said Bureau in Liber 18544 at Page 475.

Said Development Agreement, as amended, was clarified by Second Amendment to Development Agreement dated October 3, 1986, recorded in said Bureau in Liber 19942 at Page 641.

j. Terms, provisions, covenants, conditions and reservations contained in Unrecorded Option Agreement, dated October 19, 1984, but effective November 1, 1984, by Haleakala Ranch Development Board, Inc., a Hawaii corporation, "Optionor", and Maui Economic Development Board, Inc., a Hawaii nonprofit corporation, "Optionee"

As amended by Unrecorded Amendment of Option Agreement, dated November 9, 1984, but effective November 1, 1984, and further amended by Unrecorded Second Amendment Option Agreement, dated January 18, 1985, but effective November 1, 1984, of which a Memorandum of Second Amendment of Development Agreement is dated January 18, 1985, but effective November 1, 1984, recorded in said Bureau in Liber 18544 at Page 479, re: option exercisable in phases over the next ten years to purchase the real property described in the Option Agreement as approximately 330 acres at Waiohuli, Kihei, Kula, Makawao, Maui, Hawaii, being a portion of Maui Tax Map Key No. 2-2-02:42.

Note: Said above Memorandum of Second Amendment does not set forth the Option Agreement which is being amended.

Third Amendment to Option Agreement dated October 2, 1986, recorded in said Bureau in Liber 19942 at Page 657.

k. Certificate and Authorization, dated May 13, 1986, recorded in said Bureau in Liber 19513 at Page 385.

l. Terms, provisions, covenants, conditions and reservations contained in Subdivision Agreement (Large Lots), dated October 21, 1986, recorded in said Bureau in Liber 20033 at Page 135, by Haleakala Ranch Company, a Hawaii corporation, "Owner" and the County Of Maui, a body politic and corporate, and a political subdivision of the State of Hawaii.

m. Grant dated December 15, 1986, recorded in said Bureau in Liber 20261 at Page 725, in favor of Maui Electric Company, Limited and Hawaiian Telephone Company, now known as Verizon Hawaii Inc., granting a perpetual right and easement to build, construct, reconstruct, rebuild, repair, maintain and operate pole and wire lines and underground power lines, etc., for the transmission of electricity, etc.

n. Grant dated April 22, 1987, recorded in said Bureau in Liber 20747 at Page 728, in favor of The Silversword Limited Partnership, a Hawaii limited Partnership, granting an easement to construct, reconstruct, install, maintain, operate, repair and remove, underground irrigation and/or sewer pipeline or pipelines, water pipelines, telephone and other communication lines, electrical conduits and chlorination lines, etc., through, under and across the "easement area" being more particularly described therein.

o. Terms, provisions, covenants, conditions and reservations contained in Subdivision Agreement (Large Lots), dated March 3, 1988, recorded in said Bureau in Liber 21848 at Page 331, by Haleakala Ranch Company, a Hawaii corporation, "Owner" and The County Of Maui, a body politic and corporate, and a political subdivision of the State of Hawaii.

p. Grant dated May 6, 1988, recorded in said Bureau in Liber 22009 at Page 763, in favor of Maui Electric Company, Limited and Hawaiian Telephone Company, now known as Verizon Hawaii Inc., granting a perpetual right and easement to build, construct, reconstruct, rebuild, repair, maintain and operate pole and wire lines and underground power lines, etc., for the transmission of electricity, etc., over, across, through and under Easement(s) "1", "2", "3" "6" and "7" and being more particularly described therein.

q. Terms, provisions, covenants, conditions and reservations contained in Farm Dwelling Agreement, dated November 22, 1988, recorded in said Bureau in Liber 22600 at Page 456, by Haleakala Ranch Company, a Hawaii corporation and County of Maui, through its Department of Public Works.

r. Terms, provisions, covenants, conditions and reservations contained in Memorandum of Option Agreement, dated October 5, 1989, recorded in said Bureau in Liber 23748 at Page 451, by Haleakala Ranch Company, a Hawaii corporation and Maui R & T Partners, a Hawaii limited partnership.

s. Grant dated October 7, 1991, recorded in said Bureau as Document No. 91-153882, in favor of Maui R & T Partners, a Hawaii limited partnership, granting a perpetual non-exclusive easement and rights of access for ingress and egress purposes, and for the construction, reconstruction, installation, maintenance, operation, repair and removal of utility lines, including, but not limited to waterlines and sewerline, over, under, across and through Easement "K", being more particularly described therein.

t. Grant dated December 17, 1991, recorded in said Bureau as Document No. 91-182691, in favor of Board of Water Supply of the County of Maui, granting a non-exclusive easement to construct, reconstruct, maintain, operate, repair, and remove a water pipeline or pipelines, etc., over, across, through and under the Easement "H", being more particularly described therein.

u. Grant dated January 8, 1992, recorded in said Bureau as Document No. 92-026833, in favor of Maui Electric Company, Limited and Hawaiian Telephone Company, now known as Verizon Hawaii Inc., granting a perpetual right and easement to build, construct, reconstruct, rebuild, repair, maintain and operate pole and wire lines and underground power lines, etc., for the transmission of electricity, etc.

v. Unrecorded License Agreement dated May 3, 1993, in favor of Baldwin * Malama, a Hawaii limited partnership, granting a license to enter upon the land described herein for the purpose of construction, installing, maintaining, and repairing three, separate retention basins and a water tank for a term of twenty (20) years commencing on January 1, 1993, and expiring on December 31, 2012.

Short Form License Agreement of which is dated May 3, 1993, recorded in said Bureau as Document No. 93-076409.

w. Terms, provisions, covenants, conditions and reservations contained in Modification of Subdivision Requirements Agreement, dated August 15, 1995, recorded in said Bureau as Document No. 95-136044, by Haleakala Ranch Company, a Hawaii corporation and Board of Water Supply of the County of Maui.

x. Grant dated October 24, 1996, recorded in said Bureau as Document No. 96-158848, in favor of GST Telecom Hawaii, Inc., a Hawaii corporation, granting a perpetual non-exclusive right and easement to build, construct, reconstruct, rebuild, repair, maintain and operate remote circuit facilities and/or underground communications lines and other appliances, etc. as may be necessary for the proper functioning of such remote circuit facilities and communication lines, together with a right of entry.

y. Grant dated December 16, 1996, recorded in said Bureau as Document No. 97-006067, in favor of GST Telecom Hawaii, Inc., a Hawaii corporation, granting a perpetual non-exclusive right and easement to build, construct, reconstruct, rebuild, repair, maintain and operate remote circuit facilities and/or underground

communications lines, etc. as may be necessary for the proper functioning of such remote circuit facilities together with a right of entry upon said land described herein.

z. Grant dated December 29, 1997, recorded in said Bureau as Document No. 98-013615, in favor of County of Maui, granting a perpetual non-exclusive easement over said Easement "RD-1" for access road and pipeline purposes in favor of Lot 3-A-2 and being more particularly described therein.

aa. Grant dated May 29, 1998, recorded in said Bureau as Document No. 98-104504, in favor of County of Maui, granting a non-exclusive easement to flow reclaimed water and to construct, reconstruct, maintain, operate, repair and replace pipes on, and the right to trim and maintain vegetation for the purposes of maintaining and managing the flow of reclaimed water over and across said Easement "EF-1", being more particularly described therein.

bb. Unrecorded License Agreement dated March 4, 1999, in favor of HBS Limited Partnership, a Hawaii limited partnership, granting a license to enter upon the land described herein for the purpose of construction, installing, maintaining, and repairing a water tank and four separate retention basins in the locations as shown in and pursuant to the terms and conditions.

Short Form License Agreement of which is dated March 4, 1999, recorded in said Bureau as Document No. 99-171886.

cc. Grant dated September 21, 1999, recorded in said Bureau as Document No. 99-175326, in favor of Maui Electric Company, Limited, a Hawaii corporation and GTE Hawaiian Telephone Company Incorporated, a Hawaii corporation now known as Verizon Hawaii, Inc., granting a perpetual right and easement to build, construct, reconstruct, rebuild, repair, maintain and operate pole and wire lines and underground power lines, etc., as may be necessary for the transmission of electricity, etc., over, across, through and under Easement "E-1" and being more particularly described therein.

dd. Terms, provisions, covenants, conditions and reservations contained in Declaration of Easement, dated August 16, 2000, recorded in said Bureau as Document No. 2000-119033, granting a 64 feet wide Roadway and Utility Easement "F" in favor of Lot 3-E of Haleakala Greens Subdivision, over and across a portion of Grant 9325, Apana 1 to Haleakala Ranch Company, being also over and across a portion of Lot 3-A of Haleakala Greens Subdivision at Waiohuli-Keokea, Makawao, Kula (Kihei), Island and County of Maui, State of Hawaii, as set forth in Declaration of Easement dated August 16, 2000, recorded in said Bureau as Document No. 2000-119033, and being more particularly described therein.

ee. Grant dated October 19, 2000, recorded in said Bureau as Document No. 2000-158607, in favor of Maui R&T Partners, a Hawaii partnership, granting an easement for utility purposes over said Easement "S" and "R" in favor of Lot 3-E-2, being more particularly described therein.

ff. Designation of Easement "L" for access and waterline purposes, as shown on survey map prepared by Warren S. Unemori, Registered Professional Engineer & Land Surveyor dated May 6, 1998.

gg. Designation of Easement "M" for drainage purposes, as shown on survey map prepared by Warren S. Unemori, Registered Professional Engineer & Land Surveyor dated May 6, 1998.

hh. Designation of Easement "N" for drainage purposes, as shown on survey map prepared by Warren S. Unemori, Registered Professional Engineer & Land Surveyor dated May 6, 1998.

ii. Grant dated April 18, 2001, recorded in said Bureau as Document No. 2001-067618, in favor of Maui Electric Company, Limited and Verizon Hawaii Inc., granting a perpetual right and easement to build, construct, reconstruct, rebuild, maintain and operate pole and wire lines and underground power lines, etc., as may be necessary for the transmission of electricity to be used for light and power and communication and control circuits, etc., also with a right of entry upon the property described therein.

2. As to PARCEL TWO above only:

a. Excepting and Reserving therefrom necessary rights-of-way to be not less than forty (40) feet wide across this tract for public roads for ingress, egress and regress, such rights-of-way to be designated by the Commissioner of Public Lands are reserved in Land Patent Grant Number 9325.

b. Restriction of abutter's rights of vehicle access, except where access is permitted along Piilani Highway contained in Final Order of Condemnation dated July 22, 1980, filed in the Circuit Court of the Second Circuit, State of Hawaii, as Civil No. 3888 on July 23, 1980, recorded in said Bureau in Liber 14909 at Page 417 on August 8, 1980.

c. Grant dated November 27, 1979, recorded in said Bureau in Liber 14518 at Page 329, in favor of County of Maui, granting a non-exclusive easement for water pipe line(s) over Easement "6", being more particularly described therein.

d. Grant dated January 29, 1980, recorded in said Bureau in Liber 14545 at Page 361, in favor of Maui Electric Company, Limited and Hawaiian Telephone Company, now known as Verizon Hawaii Inc., granting a perpetual easement for utility purposes over Easement "H", being more particularly described therein.

e. Terms, provisions, covenants, conditions and reservations contained in Agreement, dated June 24, 1983, recorded in said Bureau in Liber 17178 at Page 748, regarding subdivision and water requirements by Haleakala Ranch Co., International Research and Development Corporation, the County of Maui and the Department of Water Supply, County of Maui.

f. Terms, provisions, covenants, conditions and reservations contained in Subdivision Agreement (Large Lots), dated July 6, 1983, recorded in said Bureau in Liber 17187 at Page 579, by Haleakala Ranch Company, a Hawaii corporation and the County of Maui, State of Hawaii.

g. Grant dated May 6, 1988, recorded in said Bureau in Liber 22009 at Page 763, in favor of Maui Electric Company, Limited and GTE Hawaii Telephone Company, Limited, now known as Verizon Hawaii Inc., granting perpetual easements for utility purposes over Easements "1" and "2", being more particularly described therein.

h. Terms, provisions, covenants, conditions and reservations contained in Elevation Agreement (Water Services), dated August 10, 1993, recorded in said Bureau as Document No. 93-161676, by Haleakala Ranch Company, a Hawaii corporation and the Department of Water Supply of the County of Maui.

i. Designation of Easement "B", as shown on map prepared by Ronaldo B. Aurelio, with Austin, Tsutsumi & Associates, Inc., dated July 27, 1994, revised August 23, 1994 for access purposes.

j. Terms, provisions, covenants, conditions and reservations contained in Private Water System Agreement, dated September 5, 1997, recorded in said Bureau as Document No. 97-137257, by Deklab Genetics Corporation, a Delaware corporation, Haleakala Ranch Company, a Hawaii corporation, the County of Maui and the Department of Water Supply of the County of Maui regarding construction of a storage building and dryer foundation/loading dock.

Tax Map Keys: Maui 2-2-002-54 (PARCEL ONE)
Maui 2-2-002-69 (PARCEL TWO)



R-593
 STATE OF HAWAII
 BUREAU OF CONVEYANCES
 RECORDED
 NOV 27, 2007 10:00 AM
 Doc No(s) 2007-205871



/s/ CARL T. WATANABE
 REGISTRAR OF CONVEYANCES

25 3/8 29

CTax (30): \$15351.90

LAND COURT SYSTEM

REGULAR SYSTEM

Return by Mail Pickup To:

Kiefer Merchant & Garneau, LLC
 444 Hana Hwy., Ste. 204
 Kahului, HI 96732
 Attention: Rick Kiefer (871-9700)

25P2
 1400220
 FNTRC
 (P/S)
 (3)

TITLE OF DOCUMENT:

WARRANTY DEED WITH RESERVATIONS AND COVENANTS

PARTIES TO DOCUMENT:

GRANTOR: HALEAKALA RANCH COMPANY, a Hawaii corporation

GRANTEE: MAUI R & T PARTNERS, LLC, a Delaware limited liability company
 1999 Avenue of the Stars, Suite 2850
 Los Angeles, CA 90067

TAX MAP KEY(S): Maui 2-2-24-14 (por.), -15, -16, -17 & -18

(This document consists of 25 pages.)

WARRANTY DEED WITH RESERVATIONS AND COVENANTS

THIS WARRANTY DEED WITH RESERVATIONS AND COVENANTS is made this 20 day of November, 2007, by and between **HALEAKALA RANCH COMPANY**, a Hawaii corporation, hereinafter referred to as "Grantor", as grantor, and **MAUI R & T PARTNERS, LLC**, a Delaware limited liability company, whose address is 1999 Avenue of the Stars, Suite 2850, Los Angeles, CA 90067, as "Grantee," as grantee.

W I T N E S S E I T H:

That the Grantor, for and in consideration of the sum of TEN AND NO/100 DOLLARS (\$10.00), in lawful money of the United States of America, and for other good and valuable consideration to the Grantor paid by the Grantee, the receipt whereof is hereby acknowledged, does hereby grant, bargain, sell and convey unto the Grantee, the property described in Exhibit "A" attached hereto and by reference made a part hereof, together with all other rights and interests described in said Exhibit "A", and the reversions, remainders, rents, issues and profits thereof, and all of the estate, right, title and interest of the Grantor, both at law and in equity, therein and thereto (the "Property").

TO HAVE AND TO HOLD the same, together with all improvements, rights, easements, privileges and appurtenances thereon and thereunto belonging or appertaining or held and enjoyed therewith, unto the Grantee as tenant in severalty, in fee simple, forever.

This conveyance is subject to the following reservations:

1. Agricultural Activities. Grantee acknowledges that agricultural activities on lands adjacent to or in the vicinity of the Property may from time to time discharge, emit, transmit, diffuse, and/or inflict noise, smoke, soot, dust, lights, noxious vapors, odors, pesticides, herbicides, and other substances, nuisances or phenomena of every description created by and/or resulting from burning, harvesting, fertilizing, weeding, watering, growing, planting, generating power, lighting, trucking, hauling, milling, and all other activities incidental to the operation of a cattle ranch or other agricultural activities. Grantee further acknowledges that the Hawaii Right To Farm Act (Chapter 165 of the Hawaii Revised Statutes) and Hawaii law limit the circumstances under which farming operations may be deemed to be a nuisance, and Grantee assumes all risks related thereto. The foregoing shall not, however, prevent Grantee from pursuing all remedies legally available to Grantee in the event of any violation of zoning or other legal restrictions on use upon such adjacent lands.

2. Reserved Right to Grant Utility and Access Easements and to Amend, Relocate or Delete Designated Easements to Reflect Improvements "As Built". Grantor

reserves to itself, and its successors and assigns the right to designate and to grant to the State of Hawaii, the County of Maui, Maui Electric Company, the Department of Water Supply of the County of Maui, Department of Public Works and Environmental Management of the County of Maui, Hawaiian Telecom, or any other appropriate governmental agency or to any public or private utility or other public or private person or entity, (a) non-exclusive easements for electrical, water, wastewater, gas, cable television, communications and other utility facilities and purposes over, under, along, across or through the "Roadway Lots", or those roadways proposed by Grantee to be constructed within the Property, and (b) non-exclusive easements for access, including vehicular, pedestrian, golf cart, and equestrian ingress and egress over the "Roadway Lots" (defined below) within the portions of the Property identified on Exhibit A as Lot 3-F (TMK (2) 2-2-24-17) of the Haleakala Greens Subdivision and Lot 3-C-1 (TMK (2) 2-2-24-14 (por.)) of the Haleakala Greens Subdivision, all of which easements may be in favor of Grantor's Lot 3-A-1-B (TMK (2) 2-2-2-54) of the Haleakala Greens Subdivision. Grantor further reserves the right to amend, modify, expand, relocate, or delete any easements that are currently designated on the Property for electrical, water, gas, cable television, communications, sewer, other utility purposes, or for drainage, access, or landscaping purposes, to the extent Grantor deems necessary in its reasonable discretion to accurately reflect the layout and location of any utility, drainage, access, landscaping or other improvements "as built". Grantor may exercise these reserved rights without the consent or joinder of Grantee, or of Grantee's successors and assigns, and easements granted by Grantor pursuant to this reservation may be on such terms and conditions as Grantor may reasonably determine, provided that Grantor shall provide Grantee a copy of any easement Grantor proposes to grant pursuant to this reservation at least fourteen days before executing and recording it. Grantee shall promptly upon Grantor's request and for no additional consideration, join in and execute such documents and instruments to effectuate such grants as may be reasonably requested by Grantor. Grantor's reserved rights in this paragraph may without Grantee's consent be assigned to Grantor's affiliates. Any provision of this paragraph notwithstanding, the foregoing reserved rights must be exercised by Grantor or its assigns in such manner as to not unreasonably interfere with the use of the Property by the Grantee, or Grantee's intended use of the Property, or the easement rights of others. Further, Grantee shall have the right, from time to time, to relocate any or all of such easements, at Grantee's expense, provided that such relocation shall not unreasonably interfere with the use of such easements by Grantor or any easement holder claiming by or through Grantor.

3. Required Width and Termination of Future Roadway Lots. In order to provide vehicular access from Piilani Highway to the land presently identified as Lot 3-A-1-B of the Haleakala Greens Subdivision (TMK (2) 2-2-2-54), Grantee hereby covenants and agrees that it will designate and subdivide roadway lots ("Roadway Lots") within Lots 3-F (TMK 2-2-24-17) and 3-C-1 (TMK 2-2-24-14 (por.)) that shall be no less than sixty four (64) feet in width, and that provide for direct access from Piilani Highway to a mutually acceptable location at the boundary between Lots 3-C-1 and Grantor's Lot 3-A-1-B (TMK (2) 2-2-2-54). Prior to selecting the location of the terminus for the future Roadway Lots, Grantee shall notify the Grantor of the planned location and cooperate with Grantor in selecting a terminus that is in a mutually acceptable

location and is consistent with both Grantor's and Grantee's future development plans. Upon the subdivision of the Roadway Lots, Grantee shall grant to Grantor an access and utility easement over those lots in substantially the form of the Grant of Access and Utility Easement between Grantor and Grantee that is recorded concurrently with this deed and that creates an access and utility easement over Lipoa Boulevard (Lot 8 of File Plan 2008) in favor of said Lot 3-A-1-B.

4. Flowage. Grantor reserves to itself and its successors and assigns an easement for the free flow and discharge over and onto the Property of surface water and run-off from Grantor's Lot 3-A-1-B, but only as such flow and discharge exists as of the date hereof, Grantor having no right to redirect or otherwise cause additional water from other lands to flow onto the Property.

AND the Grantor hereby covenants and agrees with the Grantee, as aforesaid, that the Grantor is lawfully seised in fee simple of the Property described in said Exhibit "A", and has good right and lawful authority to sell and convey the same as aforesaid; that the Property is free and clear of all encumbrances, subject, however, to the reservations, restrictions, and encumbrances contained herein and shown on said Exhibit "A", and that the Grantor will WARRANT AND DEFEND the same unto the Grantee as aforesaid, against the lawful claims and demands of all persons whomsoever, except as herein set forth.

AND, in consideration of the premises, the Grantee does hereby accept the Property conveyed hereby on the terms, conditions, covenants and restrictions contained herein, and Grantee does further acknowledge, covenant and agree that the Property is conveyed to Grantee "As Is, Where Is, and With All Faults," and except for the terms, conditions, covenants and restrictions contained herein and otherwise agreed to by Grantor in writing, Grantee is not relying on any representations or warranties of any kind whatsoever, whether oral or written, express, or implied, from Grantor, or any officer, employee, attorney, agent or broker of Grantor, as to any matter concerning the Property, or set forth, contained or addressed in any materials (including but not limited to the completeness thereof), including but not limited to: the condition of the soil, subsoil, surface or other physical condition of the Property; the existence or nonexistence of hazardous or toxic materials, wastes or substances or archaeological matters, including without limitation, access, and gathering rights, trails, fishing rights, burial sites and sites of religious significance; the fitness or suitability of the Property for any particular use or purpose; applicable restrictive covenants, governmental laws, rules, regulations, and limitations; the zoning, subdivision, use, density, location or development of the Property; the necessity or availability of any rezoning, zoning variances, conditional use permits, special management area permits, building permits, environmental impact statements and other governmental permits, approvals or acts; the physical condition of the Property, including, without limitation, the structural elements, if any, appurtenances, access, landscaping, and any electrical, mechanical, plumbing, sewage and utility systems, facilities and appliances; the Property's compliance with any building code, the Occupational Safety and Health Act, the Americans with Disabilities Act of 1990, as amended, and other laws, statutes, regulations or ordinances; the size, dimension, or topography of the Property, including

without limitation, any flood hazard area or tsunami inundation area, any surface, soil, geologic, drainage, flooding or groundwater conditions or other physical conditions and characteristics of or affecting the Property or adjoining land, such as aircraft overflight, traffic, drainage, flooding, erosion, air, water or minerals; the availability or adequacy of water, sewage, gas, electrical or other utilities serving the Property; its investment value or resale value; or any other matter. Except as specifically provided herein and otherwise agreed to by Grantor in writing, Grantee, for itself and its successors and assigns, assumes all risks regarding all aspects of the Property, and the condition thereof, known or unknown, including without limitation the matters described in this paragraph above, and forever, fully, and finally releases Grantor from claims or liability therefor.

AND GRANTEE acknowledges and agrees that Grantor owns and may in the future own lands adjacent to or nearby the Property hereby demised, the value of which lands are or may be maintained and enhanced by the use of the Property in accordance with the terms of this instrument. From and after the date hereof, each owner of the Property hereby demised, or any portion thereof, by taking title thereto, for itself and its successors and assigns, acknowledge and agree that Grantor, notwithstanding any lack of a legal property interest in the Property or any portion thereof, shall have "standing" in the legal sense to enforce the reservations, covenants, conditions, and restrictions of this instrument.

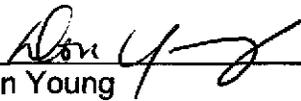
Each of the foregoing reservations, covenants, agreements, acknowledgments, waivers and releases shall constitute covenants running with the land. Each such covenant, agreement, acknowledgment, waiver and release shall be binding upon, and all references to "Grantee" shall mean and include, the Grantee and its successors and assigns, and all persons now or hereafter acquiring any right, title or interest in or to the Property (or any portion thereof) or occupying all or any portion of the Property. By accepting any right, title or interest in the Property (or any portion thereof) or by occupying all or any portion of the Property, each such person automatically shall be deemed to have made and agreed to, and shall be bound by, observe and be subject to, each of the foregoing covenants, agreements, acknowledgments, waivers and releases. The terms "Grantor" and "Grantee," wherever used herein, and any pronouns used in place thereof, shall mean and include the singular and the plural, and the use of any gender shall mean and include all genders.

The parties hereto agree that this instrument may be executed in counterparts, each of which shall be deemed an original, and said counterparts shall together constitute one and the same agreement, binding all of the parties hereto, notwithstanding all of the parties are not signatory to the original or the same counterparts. For all purposes, including, without limitation, recordation, filing and delivery of this instrument, duplicate unexecuted and unacknowledged pages of the counterparts may be discarded and the remaining pages assembled as one document.

IN WITNESS WHEREOF, the parties hereto have caused this Deed to be executed on the day and year first above written.

GRANTOR

HALEAKALA RANCH COMPANY

By 
Don Young
Its President

By 
J. Scott Meidell
Its Vice President

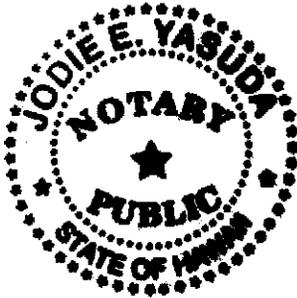
GRANTEE

MAUI R & T PARTNERS, LLC

By 
Michael Rosenfeld
Its Manager

STATE OF HAWAII)
)
COUNTY OF MAUI) SS.

On this 20th day of November, 2007, before me appeared DON YOUNG and J. SCOTT MEIDELL, satisfactorily proven to me, who, by me duly sworn, did say that they are the President and Vice President, respectively, of HALEAKALA RANCH COMPANY, a Hawaii corporation, and that the instrument was signed on behalf of said corporation by authority of its Board of Directors, and the said officers acknowledged said instrument to be the free act and deed of said corporation.



Jodie E. Yasuda
Name: Jodie E. Yasuda

Notary Public, State of Hawaii

My commission expires: July 8, 2009

IN WITNESS WHEREOF, the parties hereto have caused this Deed to be executed on the day and year first above written.

GRANTOR

HALEAKALA RANCH COMPANY

By _____
Don Young
Its President

By _____
J. Scott Meidell
Its Vice President

GRANTEE

MAUI R & T PARTNERS, LLC

By _____
J. Stephen Goodfellow
Its Manager

STATE OF HAWAII)
) SS.
COUNTY OF MAUI)

On this 26 day of NOVEMBER, 2007, before me personally appeared ✓ Stephen Goodfellow, to me personally known/proved to me on the basis of satisfactory evidence, who, being by me duly sworn or affirmed, did say that such person executed the foregoing instrument as the free act and deed of such person, and if applicable in the capacity shown, having been duly authorized to execute such instrument in such capacity.



Name: _____

Notary Public, State of Hawaii

Desiree A.P. Lopes
My Commission Expires 3-30-08

My commission expires: _____

LS

Exhibit "A"

Parcel First: All of that certain parcel of land (being portion(s) of the land(s) described in and covered by Land Patent Grant Number 9325, Apana 1 to Haleakala Ranch Company) situate, lying and being at Waiohuli-Keokea, Makawao, Kula, Island and County of Maui, State of Hawaii, being Lot 3-C-1 of the Haleakala Greens Subdivision, more particularly described as follows:

Beginning at a point at the southwesterly corner of this lot, the coordinates of said point of beginning referred to Government Survey Traingulation Station "PUU-O-KALI" being: 8,023.35 feet North and 16,577.70 feet West and running by azimuths measured clockwise from True South:

| | | | | |
|-----|------|---------|----------|--|
| 1. | 105° | 40' | 600.00 | feet along the remainder of Grant 9325 Apana 1 to Haleakala Ranch Company, being also along Lot 13-B of Maui Research and Technology Park - Phase I/Increment I to a point; |
| 2. | 40° | 00' | 290.00 | feet along same to a point; |
| 3. | 60° | 40' | 325.00 | feet along same to a point; |
| 4. | 62° | 46' | 735.18 | feet along the remainder of Grant 9325 Apana 1 to Haleakala Ranch Company being also along Lots 13-A and 13-B of Maui Research and Technology Park - Phase I/Increment I to a point; |
| 5. | 152° | 46' | 363.03 | feet along the remainder of Grant 9325 Apana 1 to Haleakala Ranch Company, being also along Lot 1 of Haleakala Greens Subdivision to a point; |
| 6. | 180° | 21' | 1,180.00 | feet along same to a point; |
| 7. | 222° | 37' 15" | 106.63 | feet along the remainder of Grant 9325 Apana 1 to Haleakala Ranch Company, being also along Lot 3-F of Haleakala Greens Subdivision to a point; |
| 8. | 351° | 00' | 173.44 | feet along the remainder of Grant 9325 Apana 1 to Haleakala Ranch Company, being also along Lot 3-C-2 of Haleakala Greens Subdivision to a point; |
| 9. | 321° | 00' | 174.23 | feet along same to a point; |
| 10. | 284° | 00' | 97.63 | feet along same to a point; |
| 11. | 226° | 00' | 113.25 | feet along same to a point; |
| 12. | 246° | 00' | 216.19 | feet along same to a point; |
| 13. | 226° | 00' | 104.08 | feet along same to a point; |
| 14. | 174° | 00' | 133.43 | feet along same to a point; |

- | | | | | |
|-----|------|---------|----------|---|
| 15. | 154° | 00' | 180.12 | feet along same to a point; |
| 16. | 165° | 35' | 149.98 | feet along same to a point; |
| 17. | 255° | 35' | 618.14 | feet along the remainder of Grant 9325 Apana 1 to Haleakala Ranch Company, being also along Lot 3-A-1-B of Haleakala Greens Subdivision to a point; |
| 18. | 307° | 35' | 1,100.00 | feet along same to a point; |
| 19. | 9° | 07' 30" | 867.86 | feet along the remainder of Grant 9325 Apana 1 to Haleakala Ranch Company, being also along Lot 3-C-2 of Haleakala Greens Subdivision to the point of beginning and containing an Area of 58.288 Acres. |

TOGETHER, WITH, the following:

1. An Access Easement K-2 over and across a portion of Lot 13-B of Maui Research and Technology Park - Phase I/Increment I and being more particularly described as follows:

Beginning at a point at the northeasterly corner of this easement, the coordinates of said point of beginning referred to Government Survey Triangulation Station "PUU-O-KALP" being 7,695.45 feet North and 17,836.08 feet West and running by azimuths measured clockwise from True South:

- | | | | | | |
|----|---|-----|-----|--------|---|
| 1. | 346° | 36' | 50" | 47.73 | feet over and across a portion of Lot 13-B of Maui Research and Technology Park - Phase I/Increment I; |
| 2. | 350° | 58' | 40" | 197.42 | feet over and across same; |
| 3. | Thence along Lot 9-A (North Holopono Street) of Maui Research and Technology Park - Phase I/Increment I on a curve to the left with the point of curvature azimuth from the radial point being: 353° 08' 20", and the point of tangency azimuth from the radial point being: 146° 58' 40", having a radius of 90.00 feet, the chord azimuth and distance being: 70° 03' 30" 40.74 feet; | | | | |
| 4. | 170° | 58' | 40" | 203.62 | feet over and across a portion of Lot 13-B of Maui Research and Technology Park - Phase I/Increment I; |
| 5. | 166° | 36' | 50' | 36.34 | feet over and across same; |
| 6. | 242° | 46' | | 41.20 | feet along Lot 3-C-1 of Haleakala Greens Subdivision, being also along the remainder of Grant 9325, Apana 1 to Haleakala Ranch Company to the point of beginning and containing an Area of 0.221 Acres, more or less. |

2. Access and utility rights over and across Lot 9-A (North Holopono Street) of Maui Research and Technology Park - Phase I/Increment I.

3. Access and Utility rights over and across Lot 8 (Lipoa Parkway of Maui

Research and Technology Park - Phase I/Increment I (File Plan 2008).

4. Access and utility rights over and across Lot 4 (Lipoa Parkway) of Haleakala Greens Subdivision.

Parcel Second: All of that certain parcel of land situate on the easterly side of Piilani Highway F. A. P. No. RF-031-1 (5), at Waiohuli-Keokea (Kihei), County of Maui, State of Hawaii, being Lot 3-D of the subdivision of Lot 3 of the "Haleakala Greens Subdivision", same being portion of Grant 9325, Apana 1 to Haleakala Ranch Company, more particularly described as follows:

Beginning at a point at the southeasterly corner of this lot, the coordinates of said point of beginning referred to Government Survey Triangulation Station "PUU-O-KALI" being 5,613.10 feet North and 16,964.83 feet West and running by azimuths measured clockwise from True South:

- | | | | |
|----|-------------|----------|---|
| 1. | 99° 07' 30" | 2,117.02 | feet along the remainder of Grant 9325 Apana 1 to Haleakala Ranch Company, being also along Lot 3-E of Haleakala Greens Subdivision to a point; |
| 2. | 181° 25' | 363.24 | feet along the remainder of Grant 9325 Apana 1 to Haleakala Ranch Company, being also along Lot 2 of Haleakala Greens Subdivision to a point; |
| 3. | 256° 55' | 517.80 | feet along same to a point; |
| 4. | 198° 30' | 91.14 | feet along same to a point; |
| 5. | 285° 30' | 825.93 | feet along the remainder of Grant 9325 Apana 1 to Haleakala Ranch Company, being also along Lot 3-B of Haleakala Greens Subdivision to a point; |
| 6. | 282° 20' | 852.02 | feet along same to a point; |
| 7. | 9° 07' 30" | 506.20 | feet along the remainder of Grant 9325 Apana 1 to Haleakala Ranch Company, being also along Lot 3-A of Haleakala Greens Subdivision to the point of beginning and containing an area of 26.694 acres, more or less. |

TOGETHER WITH, the following:

1. A Roadway Access Easement over and across all of Lot 4 (Private Roadway Lot) of Haleakala Greens Subdivision, subject to Vehicular Access Restrictions from Piilani Highway, F. A. P. No. RF-031-1 (5) and being more particularly described as follows:

Beginning at a point at the southwesterly corner of this easement, being also the southwesterly corner of Lot 4 of Haleakala Greens Subdivision, the coordinates of said point of beginning referred to Government Survey Triangulation Station "PUU-O-KALI", being 6,291.97 feet North and 20,216.35 feet West and running by azimuths measured clockwise from True South:

- | | | | |
|----|--------------|--------|---|
| 1. | 170° 36' 30" | 458.05 | feet along the easterly side of Piilani Highway, F. A. P. No. RF-031-1 (5); |
|----|--------------|--------|---|

2. 80° 36' 30" 5.00 feet along same;
3. 170° 36' 30" 156.95 feet along same;
4. 305° 36' 30" 190.92 feet along the remainder of Grant 9325 Apana 1 to Haleakala Ranch Company, being also along Lot A of Haleakala Greens Subdivision;
5. 350° 36' 30" 100.00 feet along same;
6. 260° 36' 30" 37.58 feet along same;
7. Thence along same on a curve to the left having a radius of 1,225.00 feet, the chord azimuth and distance being: 247° 30' 45" 555.12 feet;
8. Thence along same on a curve to the right having a radius of 1,071.94 feet, the chord azimuth and distance being: 261° 27' 30" 974.69 feet;
9. 288° 30' 287.03 feet along same;
10. 18° 30' 150.00 feet along the remainder of Grant 9325 Apana 1 to Haleakala Ranch Company, being also along Lot 3 of Haleakala Greens Subdivision;
11. 108° 30' 287.03 feet along the remainder of Grant 9325 Apana 1 to Haleakala Ranch Company, being also along Lot 2 of Haleakala Greens Subdivision;
12. Thence along same on a curve to the left having a radius of 921.94 feet, the chord azimuth and distance being 81° 27' 30" 838.30 feet;
13. Thence along same on a curve to the right having a radius of 1,375.00 feet, the chord azimuth and distance being 67° 30' 45" 623.10 feet;
14. 80° 36' 30" 37.58 feet along same;
15. 350° 36' 30" 100.00 feet along same;
16. 35° 36' 30" 183.85 feet along same to the point of beginning and containing an area of 7.855 acres, more or less.

2. A Roadway Access and Utility Easement "C" (150-foot wide) over and across a portion of Grant 9325 Apana 1 to Haleakala Ranch Company being also over and across a portion of Lot 3-B of Haleakala Greens Subdivision and being more particularly described as follows:

Beginning at a point at the southwesterly corner of this easement, the azimuth and distance from the southwesterly corner of Lot 3-B of Haleakala Green Subdivision being 198° 30' 318.86 feet, the coordinates of said point of beginning referred to Government Survey Triangulation Station "PUU-O-KALI", being 6,817.99 feet North and 18,411.63 feet West and running by azimuths measured clockwise from True South:

1. 198° 30' 150.00 feet along the remainder of Grant 9325 Apana 1 to Haleakala Ranch Company, being also along Lot 4 (Private Roadway Lot) of Haleakala Green Subdivision;
2. 288° 30' 47.16 feet over and across a portion Grant 9325 Apana 1 to Haleakala Ranch Company, being also over and across Lot 3-B of Haleakala Greens Subdivision;
3. Thence over and across same on a curve to the left having a radius of 9,925.00 feet, the chord azimuth and distance being: 285° 15' 1,125.35 feet;
4. 282° 00' 430.22 feet over and across same;
5. 9° 07' 30" 150.19 feet along the remainder of Grant 9325 Apana 1 to Haleakala Ranch Company, being also along Lot 3-A of Haleakala Greens Subdivision;
6. 102° 00' 437.75 feet over and across a portion Grant 9325 Apana 1 to Haleakala Ranch Company, being also over and across a portion of Lot 3-B of Haleakala Greens Subdivision;
7. Thence over and across same on a curve to the right having a radius of 10,075.00 feet, the chord azimuth and distance being: 105° 15' 1,142.36 feet;
8. 108° 30' 47.16 feet over and across same to the point of beginning and containing an area of 5.563 acres or 242,343 square feet, more or less.

3. A Roadway Access and Utility Easement "D" (64-feet wide) over and across a portion of Grant 9325 Apana 1 to Haleakala Ranch Company being also over and across a portion of Lot 3-B of Haleakala Greens Subdivision and being more particularly described as follows:

Beginning at a point at the southwesterly corner of this easement, the azimuth and distance from the southwesterly corner of Lot 3-B of Haleakala Greens Subdivision being 385° 30' 395.25 feet, the coordinates of said point of beginning referred to Government Survey Triangulation Station "PUU-O-KALI", being 6,409.98 feet North and 18,131.94 feet West and running by azimuths measured clockwise from True South:

1. Over and across a portion of Grant 9325 Apana 1 to Haleakala Ranch Company, being also over and across a portion of Lot 3-B of Haleakala Greens Subdivision on a curve to the right having a radius of 1,177.00 feet, the chord azimuth and distance being: 192° 07' 47" 199.85 feet;
2. 197° 00' 75.63 feet over and across same;
3. Thence over and across same on a curve to the left having a radius of 30.00 feet, the chord azimuth and distance being: 151° 55' 04.75" 42.49 feet;

4. Thence over and across same and along the south side of Roadway and Utility Easement "C" of Haleakala Greens Subdivision on a curve to the left having a radius of 10,075.00 feet, the chord azimuth and distance being: 286° 29' 03.9" 123.64 feet;
5. Thence over and across a portion of Grant 9325 Apana 1 to Haleakala Ranch Company, being also over and across a portion of Lot 3-B of Haleakala Greens Subdivision on a curve to the left having a radius of 30.00 feet, the chord azimuth and distance being: 61° 33' 59.15" 42.10 feet;
6. 17° 00' 75.75 feet over and across same;
7. Thence over and across same on a curve to the left having a radius of 1,133.00 feet, the chord azimuth and distance being: 11° 53' 28" 198.22 feet;
8. 105° 30' 64.71 feet along the remainder of Grant 9325 Apana 1 to Haleakala Ranch Company, being also along Lot 3-D of Haleakala Greens Subdivision to the point of beginning and containing an area of 19,857 square feet, more or less.

Parcel Third: All of that certain parcel of land situate on the easterly side of Piilani Highway F. A. P. No. RF-031-1 (5), at Waiohuli-Keokea (Kihei), County of Maui, State of Hawaii, being Lot 3-E-1 of the subdivision of Lot 3 of the "Haleakala Greens Subdivision", same being portion of Grant 9325, Apana 1 to Haleakala Ranch Company, more particularly described as follows:

Beginning at a point at the southeasterly corner of this lot, the coordinates of said point of beginning referred to Government Survey Triangulation Station "PUU-O-KALI" being 3,913.10 feet North and 17,237.89 feet West and running by azimuths measured clockwise from True South:

1. 80° 58' 10" 1,410.00 feet along the remainder of Grant 9325 Apana 1 to Haleakala Ranch Company, being also along Lot 3-E-2 of Haleakala Greens Subdivision to a point;
2. 350° 30' 699.93 feet along same to a point;
3. 298° 30' 84.00 feet along same to a point;
4. 76° 15' 249.57 feet along the remainder of Grant 9325 Apana 1 to Haleakala Ranch Company, being also along Lot 3-A-1-B of Haleakala Greens Subdivision to a point;
5. 188° 00' 275.00 feet along the remainder of Grant 9325 Apana 1 to Haleakala Ranch Company, being also along Lot 2 of Haleakala Greens Subdivision to a point;
6. 170° 30' 920.00 feet along same to a point;
7. 156° 07' 760.00 feet along same to a point;

- | | | | | | |
|-----|------|-----|-----|----------|---|
| 8. | 168° | 25' | | 590.00 | feet along same to a point; |
| 9. | 198° | 45' | | 515.00 | feet along same to a point; |
| 10. | 181° | 25' | | 106.53 | feet along same to a point; |
| 11. | 279° | 07' | 30" | 2,117.02 | feet along the remainder of Grant 9215 Apana 1 to Haleakala Ranch Company, being also along Lot 3-D of Haleakala Greens Subdivision to a point; |
| 12. | 9° | 07' | 30" | 1,721.78 | feet along the remainder of Grant 9215 Apana 1 to Haleakala Ranch Company, being also along Lot 3-A-1-B of Haleakala Greens Subdivision to the point of beginning and containing an area of 90.189 acres, more or less. |

TOGETHER WITH, the following:

1. An existing Roadway and Utility Easement "F" over and across a portion of Grant 9325 Apana 1 to Haleakala Ranch Company, being also over and across a portion of Lot 3-A-1-B of Haleakala Greens Subdivision.

Parcel Fourth: All of that certain parcel of land situate on the easterly side of Piilani Highway F. A. P. No. RF-031-1 (5), at Waiohuli-Keokea (Kihei), County of Maui, State of Hawaii, being Lot 3-F of the subdivision of Lot 3 of the "Haleakala Greens Subdivision", same being portion of Grant 9325, Apana 1 to Haleakala Ranch Company, more particularly described as follows:

Beginning at a point at the northwesterly corner of this lot, being also the northeasterly corner of Lot 1 of Haleakala Greens Subdivision, the coordinates of said point of beginning referred to Government Survey Triangulation Station "PUU-O-KALI" being 10,267.07 feet North and 20,573.46 feet West and running by azimuths measured clockwise from True South:

- | | | | | | |
|----|------|-----|-----|--------|---|
| 1. | 266° | 30' | | 150.00 | feet along the remainder of Grant 9325 Apana 1 to Haleakala Ranch Company, being also along Lot 3-A of Haleakala Greens Subdivision to a point; |
| 2. | 293° | 00' | | 410.00 | feet along same to a point; |
| 3. | 291° | 30' | | 350.00 | feet along same to a point; |
| 4. | 286° | 00' | | 850.00 | feet along same to a point; |
| 5. | 301° | 30' | | 650.00 | feet along same to a point; |
| 6. | 283° | 15' | | 270.00 | feet along same to a point; |
| 7. | 42° | 37' | 15" | 518.60 | feet along the remainder of Grant 9325 Apana 1 to Haleakala Ranch Company, being also along Lot 3-C of Haleakala Greens Subdivision to a point; |

- | | | | |
|-----|----------|--------|---|
| 8. | 83° 00' | 585.00 | feet along the remainder of Grant 9325 Apana 1 to Haleakala Ranch Company, being also along Lot 1 of Haleakala Greens Subdivision to a point; |
| 9. | 102° 25' | 640.00 | feet along same to a point; |
| 10. | 125° 30' | 800.00 | feet along same to a point; |
| 11. | 160° 00' | 815.00 | feet along same to the point of beginning and containing an area of 39.018 acres, more or less. |

Together with easement for roadway and utility purposes over and across Easement "A" over and across Lot 1-A, as set forth in Grant dated May 4, 2006, recorded in said Bureau as Document No. 2006-122939, to which reference is hereby made.

Parcel Fifth: All of that certain parcel of land situate on the easterly side of Piilani Highway F. A. P. No. RF-031-1 (5), at Waiohuli-Keokea (Kihei), County of Maui, State of Hawaii, being Lot 4 (Roadway Lot) of the "Haleakala Greens Subdivision", same being portion of Grant 9325, Apana 1 to Haleakala Ranch Company, more particularly described as follows:

Beginning at a point at the southwest corner of this lot, the coordinates of said point of beginning referred to Government Survey Triangulation Station "PUU-O-KALI" being 6,291.97 feet North and 20,216.35 feet West and running by azimuths measured clockwise from True South:

- | | | | |
|-----|--|--------|--|
| 1. | 170° 36' 30" | 458.05 | feet along the easterly side of Piilani Highway, F. A. P. No. RF-031-1 (5) to a point; |
| 2. | 80° 36' 30" | 5.00 | feet along same to a point; |
| 3. | 170° 36' 30" | 156.95 | feet along same to a point; |
| 4. | 305° 36' 30" | 190.92 | feet along Lot 1 of Haleakala Greens Subdivision to a point; |
| 5. | 350° 36' 30" | 100.00 | feet along same to a point; |
| 6. | 260° 36' 30" | 37.58 | feet along same to a point; |
| 7. | Thence along same on a curve to the left having a radius of 1,225.00 feet, the chord azimuth and distance being: 247° 30' 45" 55.12 feet to a point; | | |
| 8. | Thence along same on a curve to the right having a radius of 1,071.94 feet, the chord azimuth and distance being: 261° 27' 30" 974.69 feet to a point; | | |
| 9. | 288° 30' | 287.03 | feet along same to a point; |
| 10. | 18° 30' | 150.00 | feet along Lot 3 of Haleakala Greens Subdivision to a point; |

11. 108° 30' 287.03 feet along Lot 2 of Haleakala Greens Subdivision to a point;
12. Thence along same on a curve to the left having a radius of 921.94 feet, the chord azimuth and distance being: 81° 27' 30" 838.30 feet to a point;
13. Thence along same on a curve to the right having a radius of 1,375.00 feet, the chord azimuth and distance being: 67° 30' 45" 623.10 feet to a point;
14. 80° 36' 30" 37.58 feet along same to a point;
15. 350° 36' 30" 100.00 feet along same to a point;
16. 35° 36' 30" 183.85 feet along same to the point of beginning and containing an area of 7.885 acres, more or less.

SUBJECT HOWEVER to the following:

1. Reservation in favor of the State of Hawaii of all mineral and metallic mines.
2. Claims arising out of rights customarily and traditionally exercise for subsistence, cultural, religious, access or gathering purposes as provided for in the Hawaii Constitution or the Hawaii revised Statutes.
3. Terms and provisions contained in unrecorded Option Agreement dated October 19, 1984, but effective November 1, 1984, by Haleakala Ranch Development Board, Inc., a Hawaii corporation, "Optionor", and Maui Economic Development Board, Inc., a Hawaii corporation, "Optionee", to which reference is hereby made.

As amended by unrecorded Amendment of Option Agreement dated November 9, 1984, but effective November 1, 1984, and further amended by unrecorded Second Amendment Option Agreement, dated January 18, 1985, but effective November 1, 1984, of which a Memorandum of Second Amendment of Development Agreement is dated January 18, 1985, but effective November 1, 1984, recorded in the Bureau of Conveyances of the State of Hawaii in Liber 18544 at Page 479, re: option exercisable in phases over the next ten years to purchase the real property described in the Option Agreement as approximately 330 acres at Waiohuli, Kihei, Kula, Makawao, Maui, Hawaii, being a portion of Maui Tax Map Key No. 2-2-002-042.

NOTE: Said Memorandum of Second Amendment does not set forth the Option Agreement which is being amended.

Third Amendment to Option Agreement dated October 2, 1986, recorded in said Bureau in Liber 19942 at Page 657, to which reference is hereby made.

4. Terms and provisions contained in unrecorded Development Agreement dated November 2, 1984, but effective November 1, 1984, by Maui Economic Development

Board, Inc., a Hawaii non-profit corporation, "Optionor", and Arroyo Development Corporation, a California corporation, and Joel R. Smolen, "Optionee", to which reference is hereby made.

Memorandum of Development Agreement of which is dated November 7, 1984, but effective November 1, 1984, recorded in the Bureau of Conveyances of the State of Hawaii in Liber 18270 at Page 477.

Said Development Agreement was amended by unrecorded Amendment of Development Agreement dated January 18, 1985, but made effective November 1, 1984.

Memorandum of Development Agreement of said unrecorded Development Agreement dated January 18, 1985, but effective November 1, 1984, recorded in said Bureau in Liber 18544 at Page 475.

Said Development Agreement, as amended, was clarified by Second Amendment to Development Agreement dated October 3, 1986, recorded in said Bureau in Liber 19942 at Page 641, to which reference is hereby made.

5. Certificate and Authorization dated May 13, 1986, recorded in the Bureau of Conveyances of the State of Hawaii in Liber 19513 at Page 385, to which reference is hereby made.

6. Subdivision Agreement (Large Lots) by and between Haleakala Ranch Company, a Hawaii corporation, "Owner", and the County of Maui, a body politic and corporate, and a political subdivision of the State of Hawaii, dated October 21, 1986, recorded in the Bureau of Conveyances of the State of Hawaii in Book 20033 at Page 135.

7. Subdivision Agreement (Large Lots) by and between Haleakala Ranch Company, a Hawaii corporation, "Owner", and the County of Maui, a body politic and corporate, and a political subdivision of the State of Hawaii, dated March 3, 1988, recorded in the Bureau of Conveyances of the State of Hawaii in Book 21848 at Page 331.

8. Covenants, conditions and restrictions as set forth in the Declaration of Covenants, Conditions and Restrictions and Reservation of Easements dated October 2, 1990, recorded in the Bureau of Conveyances of the State of Hawaii as Document No. 90-154304.

The foregoing Declaration was amended by instrument recorded in said Bureau as Document No. 2001-020165.

10. As to Parcel First Only:

a. Agreement for Deferral of Subdivision Requirements, upon and subject to all of the provisions contained therein, by and between Haleakala Ranch Company, a Hawaii corporation, and the Department of Water Supply of the County of Maui, dated June 9, 2003, recorded in the Bureau of Conveyances of the State of Hawaii as Document No. 2003-129719.

b. Easement "K-1" for access and utilities purposes, in favor of Piilani Homeowners Association, a Hawaii nonprofit corporation, as set forth in Deed dated August 25, 2003, recorded in said Bureau as Document No. 2003-182757, as more particularly described as follows:

| | | | | | |
|-----|------|-----|-----|--------|--|
| 1. | 345° | 51' | | 230.31 | feet over and across a portion of Lot 3-C-1 of Haleakala Greens Subdivision, being also over and across a portion of Grant 9325, Apana 1 to Haleakala Ranch Company; |
| 2. | 340° | 09' | 10" | 357.80 | feet over and across same; |
| 3. | 340° | 55' | | 207.38 | feet over and across same; |
| 4. | 346° | 36' | 50" | 277.69 | feet over and across same; |
| 5. | 62° | 46' | | 41.20 | feet along Lot 13-B of Maui Research and Technology Park - Phase I/Increment I; |
| 6. | 166° | 36' | 50" | 285.56 | feet over and across a portion of Lot 3-C-1 of Haleakala Greens Subdivision, being also over and across a portion of Grant 9325, Apana 1 to Haleakala Ranch Company; |
| 7. | 160° | 55' | | 205.13 | feet over and across same; |
| 8. | 160° | 09' | 10" | 359.52 | feet over and across same; |
| 9. | 165° | 51' | | 253.70 | feet over and across same; |
| 10. | 284° | 00' | | 45.37 | feet along Lot 3-C-2 of Haleakala Greens Subdivision, being also along the remainder of Grant 9325, Apana 1 to Haleakala Ranch Company to the point of beginning and containing an Area of 1.000 Acre, more or less. |

c. Agreement to Relocate Sewerline Easement Area, upon and subject to all of the provisions contained therein, by and between Haleakala Ranch Company, a Hawaii corporation, Pacific Rim Land, Inc., a Washington corporation, and Maui R & T Partners, a Hawaii limited partnership, dated May 4, 2006, recorded in said Bureau as Document No. 2006-122945, regarding the relocation of Easement "K-1" for roadway and utility purposes.

11. As to Parcel Second Only:

a. An existing Roadway and Utility Easement "I" in favor of the Maui R & T Partners, as shown on survey map of Lot 3-E into Lots 3-E-1 and 3-E-2 by Reed M. Ariyoshi, Licensed Professional Land Surveyor No. 6597, dated April 6, 2000, as revised, as granted by instrument dated October 7, 1991, recorded in the Bureau of Conveyances of the State of Hawaii as Document No. 91-153882, to which reference is hereby made.

b. An existing Electrical and Telephone Easement "5" in favor of Maui Electric Company, Inc. and Hawaiian Telephone Company, Inc., as shown on survey map of Lot 3-E into Lots 3-E-1 and 3-E-2 by Reed M. Ariyoshi, Licensed Professional Land Surveyor No. 6597, dated April 6, 2000,

as revised, as granted by instrument dated May 6, 1988, recorded in said Bureau in Book 22009 at Page 763, to which reference is hereby made.

c. An existing Utility Easement "Q" in favor of Lot 3-E-2 of Haleakala Greens Subdivision, as shown on survey map of Lot 3-E into Lots 3-E-1 and 3-E-2 by Reed M. Ariyoshi, Licensed Professional Land Surveyor No. 6597, dated April 6, 2000, as revised, as granted by instrument dated October 19, 2000, recorded in said Bureau as Document No. 2000-158607 to Maui R & T Partners, a Hawaii partnership.

d. An Encroachment Agreement, upon and subject to all the provisions contained therein by and between Haleakala Ranch Company, Limited, a Hawaii corporation, and Tech One Partners, a Hawaii general partnership, dated October 11, 2000, recorded in said Bureau as Document No. 2000-145946, regarding an encroachment of a hog wire fence.

e. Easement in favor of Haleakala Ranch Company, a Hawaii corporation and Pacific Rim Land, Inc., a Washington corporation, granted by instrument dated November 20, 2007, recorded in said Bureau as Document No. _____, for wastewater purposes.

12. As to Parcel Third Only:

a. A Drainage Easement "U" in favor of Lot 3-E-2 of Haleakala Greens Subdivision and being more particularly described as follows:

Beginning at a point at the southeasterly corner of this easement, the azimuth and distance from the northwesterly corner of Lot 3-E-2 of Haleakala Greens Subdivision being: 350° 30' 314.67 feet, the coordinates of said point of beginning referred to Government Survey Triangulation Station "PUU-O-KALI" being 3,891.43 feet North and 18,578.47 feet West and running by azimuths measured clockwise from True South:

- | | | | |
|----|----------|--------|--|
| 1. | 68° 00' | 102.43 | feet over and across a portion of Grant 9325 Apana 1 to Haleakala Ranch Company, being also over and across a portion of Lot 3-E-1 of Haleakala Greens Subdivision; |
| 2. | 170° 30' | 51.21 | feet along the remainder of Grant 9325 Apana 1 to Haleakala Ranch Company, being also along Lot 2 of Haleakala Greens Subdivision; |
| 3. | 248° 00' | 102.43 | feet over and across a portion of Grant 9325 Apana 1 to Haleakala Ranch Company, being also over and across a portion of Lot 3-E-1 of Haleakala Greens Subdivision; |
| 4. | 350° 30' | 51.21 | feet along the remainder of Grant 9325 Apana 1 to Haleakala Ranch Company, being also along Lot 3-E-2 of Haleakala Greens Subdivision to the point of beginning and containing an area of 5,121 square feet, more or less, as per survey of Reed M. Ariyoshi, Licensed Professional Land Surveyor No. 6597, dated April 6, 2000, as revised. |

b. A portion of existing Utility Easement "J" in favor of Maui R & T Partners, as shown on survey map of Lot 3-E into Lots 3-E-1 and 3-E-2 by Reed M. Ariyoshi, Licensed Professional Land Surveyor No. 6597, dated April 6, 2000, as revised, as granted by instrument dated October 7, 1991, recorded in the Bureau of Conveyances of the State of Hawaii as Document No. 91-153882, to which reference is hereby made.

c. A Roadway and Utility Easement "P" in favor of Lot 3-E-2 of Haleakala Greens Subdivision and being more particularly described as follows:

Beginning at a point at the southwesterly corner of this easement, being also the southwesterly corner of Lot 3-E-1 and the southeasterly corner of Lot 2 of Haleakala Greens Subdivision, the coordinates of said point of beginning referred to Government Survey Triangulation Station "PUU-O-KALI" being 2,902.06 feet North and 18,683.49 feet West and running by azimuths measured clockwise from True South:

| | | | |
|----|--------------|--------|---|
| 1. | 188° 00' | 275.00 | feet along the remainder of Grant 9325 Apana 1 to Haleakala Ranch Company, being also along Lot 2 of Haleakala Greens Subdivision; |
| 2. | 170° 30' | 508.69 | feet along same; |
| 3. | 260° 58' 10" | 100.00 | feet over and across a portion of Grant 9325 Apana 1 to Haleakala Ranch Company, being also over and across a portion of Lot 3-E-1 of Haleakala Greens Subdivision; |
| 4. | 350° 30' | 699.93 | feet along the remainder of Grant 9325 Apana 1 to Haleakala Ranch Company, being also along Lot 3-E-2 of Haleakala Greens Subdivision; |
| 5. | 298° 30' | 84.00 | feet along same; |
| 6. | 76° 15' | 249.57 | feet along the remainder of Grant 9325 Apana 1 to Haleakala Ranch Company, being also along Lot 3-A-1-B of Haleakala Greens Subdivision to the point of beginning and containing an area of 89,531 square feet, more or less. |

d. An existing Roadway and Utility Easement "J" in favor of Maui R & T Partners, as shown on survey map of Lot 3-E into Lots 3-E-1 and 3-E-2 by Reed M. Ariyoshi, Licensed Professional Land Surveyor No. 6597, dated April 6, 2000, as revised.

e. A portion of an existing Electrical and Telephone Easement "4" in favor of Maui Electric Company, Ltd. and GTE Hawaiian Telephone Company, Inc., as shown on survey map of Lot 3-E into Lots 3-E-1 and 3-E-2 by Reed M. Ariyoshi, Licensed Professional Land Surveyor No. 6597, dated April 6, 2000, as revised, as granted by instrument dated May 6, 1988, recorded in said Bureau in Book 22009 at Page 763.

f. A Farm Dwelling Agreement, upon and subject to all of the provisions contained therein, by and between Haleakala Ranch Company, a Hawaii corporation, and County of Maui, through

its Department of Public Works, dated November 22, 1988, recorded in said Bureau in Book 22600 at Page 456.

g. A Hold Harmless Agreement, upon and subject to all of the provisions contained therein, by and between County of Maui, through its Department of Public Works and Waste Management, and Haleakala Ranch Company, a Hawaii corporation, dated June 9, 2000, recorded in said Bureau as Document No. 2000-087785, regarding inadequate wastewater treatment capacity.

h. An Agreement Relating to Fire Protection, upon and subject to all of the provisions contained therein, by and between Micro Gaia, Inc., a Hawaii corporation, and Haleakala Ranch Company, a Hawaii corporation, dated August 2, 2000, recorded in said Bureau as Document No. 2000-109140.

i. An Agreement for Allocation of Future Subdivision Potential, upon and subject to all of the provisions contained therein, by and between Haleakala Ranch Company and County of Maui, through its Department of Public Works and Waste Management, dated August 17, 2000, recorded in said Bureau as Document No. 2000-130041.

j. A Subdivision Agreement (Agricultural Use), upon and subject to all of the provisions contained therein, by and between Haleakala Ranch Company and County of Maui, through its Department of Public Works and Waste Management, dated August 17, 2000, recorded in said Bureau as Document No. 2000-130042.

k. Easement in favor of Maui R & T Partners, a Hawaii partnership, granted by instrument dated October 19, 2000, recorded in said Bureau as Document No. 2000-158607 for utility purposes.

l. An Agreement to Relocate Reclaimed Water Easement Area, upon and subject to all of the provisions contained therein, by and between Haleakala Ranch Company, a Hawaii corporation, Pacific Rim Land, Inc., a Washington corporation, and Maui R & T Partners, a Hawaii limited partnership, dated May 4, 2006, recorded in said Bureau as Document No. 2006-122944, regarding the relocation of Easement "S-1" for utility purposes.

m. Easement in favor of Haleakala Ranch Company, a Hawaii corporation and Pacific Rim Land, Inc., a Washington corporation, granted by instrument dated November 20, 2007, recorded in said Bureau as Document No. _____ for wastewater purposes.

13. As to Parcel Fourth Only:

a. License Agreement dated August 31, 2007 recorded in the Bureau of Conveyances of the State of Hawaii as Document No. _____, by and between Haleakala Ranch Company, a Hawaii corporation, Maui R&T Partners, a Hawaii limited partnership, and Elleair Maui Golf Club, LLC, a Hawaii limited liability company.

14. As to Parcel Fifth Only:

a. Vehicular access restrictions from Piilani Highway, F. A. P. No. RF-031-1 (5), along Course Numbers 1, 2 and 3 of said lot.

b. Easement in favor of The Silversword Limited Partnership, a Hawaii limited partnership, granted by instrument dated April 22, 1987, recorded in the Bureau of Conveyances of the State of Hawaii in Book 20747 at Page 720 for utility purposes.

c. Easement in favor of Maui Electric Company, Limited, a Hawaii corporation, and GTE Hawaiian Telephone Company, Incorporated, granted by instrument dated April 2, 1991, recorded in said Bureau as Document No. 91-069152 for utility purposes.

d. Easement in favor of Board of Water Supply of the County of Maui, granted by instrument dated December 17, 1991, recorded in said Bureau as Document No. 91-182691 for water pipeline purposes.

e. Easement in favor of Maui Highlands Properties LLC, a Delaware limited liability company, granted by instrument dated February 25, 2004, recorded in said Bureau as Document No. 2004-040593 for access and utility purposes.

f. Easement in favor of Elleair Maui Golf Club, LLC, a Hawaii limited liability company, granted by instrument dated March 30, 2006, recorded in said Bureau as Document No. 2006-082468 for access and utility purposes.

g. Easement in favor of Maui Highlands Properties LLC, a Delaware limited liability company, granted by instrument dated March 30, 2006, recorded in said Bureau as Document No. 2006-082469 for access and utility purposes.

h. Easement in favor of Maui Highlands Properties LLC, a Delaware limited liability company, granted by instrument dated March 30, 2006, recorded in said Bureau as Document No. 2006-082470 for access and utility purposes.

i. Easement in favor of Haleakala Ranch Company, a Hawaii corporation and Pacific Rim Land, Inc., a Washington corporation, granted by instrument dated November 20, 2007 recorded in said Bureau as Document No. _____ for access and utility purposes.

Tax Map Key Nos. (2) 2-2-24-14 (por.), -15, -16, -17 & -18

Chapter 4
LETTER OF
AUTHORIZATION

MAUI R&T PARTNERS, LLC

June 10, 2010

Ms. Kathleen Ross Aoki, Director
Department of Planning
County of Maui
250 South High Street
Wailuku, Maui Hawaii 96793

Re: Request for a District Boundary Amendment, Community Plan Amendment, and Change in Zoning for property that comprises the proposed Maui Research & Technology Park Master Plan Update, situated east of Piilani Highway, Kihei, Maui, Hawaii; TMK Parcel Nos: (2) 2-2-024:04, 08, 09, 14-18.

Dear Ms. Ross Aoki:

Maui R&T Partners, LLC, Owner of the above-referenced property, authorizes its consultant, Chris Hart & Partners, Inc. and its attorney Blaine Kobayashi of Carlsmith Ball LLP, to apply for a District Boundary Amendment, Community Plan Amendment, Change in Zoning, and any other required land use permit, for property that comprises the proposed Maui Research & Technology Park Master Plan Update, situated east of Piilani Highway, Kihei, Maui, Hawaii; TMK Parcel Nos: (2) 2-2-024:04, 08, 09, 14-18.

Very truly yours,

MAUI R&T PARTNERS, LLC,
a Delaware limited liability company

By: Maui Tech Associates, LLC
a Delaware limited liability company,
its Administrative Member

By: _____
Michael Rosenfeld
Manager

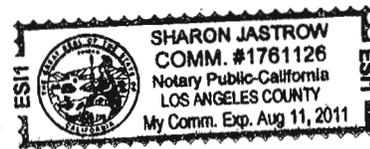
State of California
County of Los Angeles

On June 14, 2010 before me, Sharon Jastrow, a Notary Public personally appeared Michael Rosenfeld who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature  (Seal)
Notary Public





HALEAKALA RANCH

• EST. MAUI 1888 •

February 16, 2010

Mr. Jeffery Hunt, Director
Department of Planning
County of Maui
250 South High Street
Wailuku, Maui, Hawaii 96793

Re: Request for a District Boundary Amendment, Community Plan Amendment, and Change in Zoning for property that comprises the eastern portion of the proposed Maui Research & Technology Park Master Plan Update, situated east of Piilani Highway, Kihei, Maui, Hawaii; TMK Parcel No: (2) 2-2-002:054 (por.).

Dear Mr. Hunt:

This letter authorizes Maui R&T Partners, Inc. and its agent, Chris Hart & Partners, Inc., on behalf of Haleakala Ranch, Owner of the above-referenced property, to apply for a District Boundary Amendment, Community Plan Amendment, Change in Zoning, and any other required land use permit, for property that comprises the eastern portion of the proposed Maui Research & Technology Park Master Plan Update, situated east of Piilani Highway, Kihei, Maui, Hawaii; TMK Parcel No. (2) 2-2-002:054 (por.).

Very truly yours,

Property Owner

Cc. Mr. Christopher L. Hart, Chris Hart & Partners, Inc.

Subscribed and sworn to before me this

16th day of March, 2010

Valerie Matsumoto
Notary Public, Second Judicial Circuit
State of Hawaii - Valerie Matsumoto

My commission expires: Feb 29, 2012

| | |
|---|--|
| Doc. Date: <u>2-16-2010</u> | # Pages: <u>1</u> |
| Notary Name: <u>Valerie Matsumoto</u> | <u>2nd</u> Circuit |
| Doc. Description: <u>Request for a District Boundary Amendment, change in Zoning for property that comprises the eastern portion of the proposed Maui Research + Technology Park Master Plan Update</u> | |
| <u>Valerie Matsumoto</u> | Notary Signature <u>3-16-2010</u> Date |



GOODFELLOW BROS., INC. GENERAL CONTRACTOR

December 10, 2012

Mr. William Spence, Director
Department of Planning
County of Maui
250 South High Street
Wailuku, Maui, Hawaii 96793

Re: Request for a Community Plan Amendment, and Change in Zoning and any other required land use permit, for property that comprises a portion of the proposed Maui Research & Technology Park Master Plan Update, situated east of Piilani Highway, Kihei, Maui, Hawaii; **TMK Parcel Nos: (2) 2-2-024:00370021, 24, 25, & 26.**

Dear Mr. Spence:

This letter authorizes Maui R&T Partners, Inc. and its agent, Chris Hart & Partners, Inc., on behalf of **Goodfellow Bros., Inc.**, Owner of the above-referenced property, to apply for a Community Plan Amendment, Change in Zoning, and any other required land use permit, for property included in the Maui Research & Technology Park Master Plan Update, situated east of Piilani Highway, Kihei, Maui, Hawaii; **TMK Parcel Nos. (2) 2-2-024:00370021, 24, 25, & 26.**

Very truly yours,

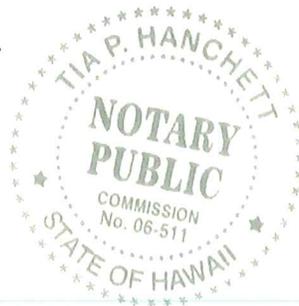
Property Owner

Cc. Mr. Jordan Hart, Chris Hart & Partners, Inc.

Subscribed and sworn to before me this

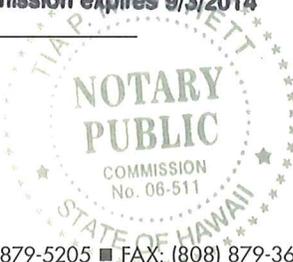
10th day of December, 2012

Notary Public, Second Judicial Circuit
State of Hawaii



My commission expires: _____

TIA P. HANCHETT
My commission expires **9/3/2014**



Doc. Date: 12/10/12 # Pages: 1

TIA P. HANCHETT, Notary Public, Second Circuit

Doc. Description: Letter of Authorization

MR-TP for GB

Notary Signature [Signature] 12/10/12

December 10, 2012

Mr. William Spence, Director
Department of Planning
County of Maui
250 South High Street
Wailuku, Maui, Hawaii 96793

Re: Request for a Community Plan Amendment, and Change in Zoning and any other required land use permit, for property that comprises a portion of the proposed Maui Research & Technology Park Master Plan Update, situated east of Piilani Highway, Kihei, Maui, Hawaii; **TMK Parcel No: (2) 2-2-024:00370022 & 23**

Dear Mr. Spence:

This letter authorizes Maui R&T Partners, Inc. and its agent, Chris Hart & Partners, Inc., on behalf of **Maui Miami Aumakua Partners Limited Partnership**, Owner of the above-referenced property, to apply for a Community Plan Amendment, Change in Zoning, and any other required land use permit, for property included in the Maui Research & Technology Park Master Plan Update, situated east of Piilani Highway, Kihei, Maui, Hawaii; **TMK Parcel Nos. (2) 2-2-024:00370022 & 23**

Very truly yours,

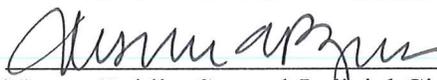


Property Owner

Cc. Mr. Jordan. Hart, Chris Hart & Partners, Inc.

Subscribed and sworn to before me this

12th day of December, 2012

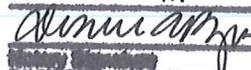

Notary Public, Second Judicial Circuit
State of Hawaii

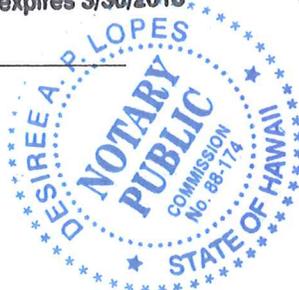
DESIREE A. P. LOPES
My commission expires 3/30/2016

My commission expires: _____

Doc. Date: 12.10.12 # Pages: 1

Doc. Description: letter of authorization

 12-12-12
Notary Signature Date
DESIREE A. P. LOPES
Notary Public, Second Circuit



Blue Pacific Holdings LLC

155 Wailea Ike Place #18
Kihei, HI 96753
808-875-0805

December 10, 2012

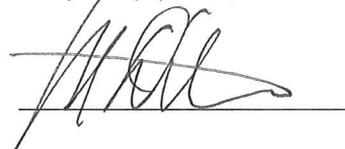
Mr. William Spence, Director
Department of Planning
County of Maui
250 South High Street
Wailuku, Maui, Hawaii 96793

Re: Request for a Community Plan Amendment, and Change in Zoning and any other required land use permit, for property that comprises a portion of the proposed Maui Research & Technology Park Master Plan Update, situated east of Piilani Highway, Kihei, Maui, Hawaii; **TMK Parcel No: (2) 2-2-024:00370001**

Dear Mr. Spence:

This letter authorizes Maui R&T Partners, Inc. and its agent, Chris Hart & Partners, Inc., on behalf of **Blue Pacific Holdings LLC**, Owner of the above-referenced property, to apply for a Community Plan Amendment, Change in Zoning, and any other required land use permit, for property included in the Maui Research & Technology Park Master Plan Update, situated east of Piilani Highway, Kihei, Maui, Hawaii; **TMK Parcel Nos. (2) 2-2-024:00370001**

Very truly yours,



Property Owner

Cc. Mr. Jordan Hart, Chris Hart & Partners, Inc.

Subscribed and sworn to before me this

10th day of December, 2012



Notary Public, Second Judicial Circuit
State of Hawaii Wanda J Shelton

My commission expires: May 23, 2015



July 9, 2012

Mr. William Spence, Director
Department of Planning
County of Maui
250 South High Street
Wailuku, Maui, Hawaii 96793

Re: Request for a Community Plan Amendment, and Change in Zoning and any other required land use permit, for property that comprises a portion of the proposed Maui Research & Technology Park Master Plan Update, situated east of Piilani Highway, Kihei, Maui, Hawaii; **TMK Parcel No: (2) 2-2-024:00370006**

Dear Mr. Spence:

This letter authorizes Maui R&T Partners, Inc. and its agent, Chris Hart & Partners, Inc., on behalf of **B E L LLC.**, Owner of the above-referenced property, to apply for a Community Plan Amendment, Change in Zoning, and any other required land use permit, for property included in the Maui Research & Technology Park Master Plan Update, situated east of Piilani Highway, Kihei, Maui, Hawaii; **TMK Parcel Nos. (2) 2-2-024:00370006**

Very truly yours,

Yolanda D. Dumalanta
for **BEL, LLC**
Property Owner

Cc. Mr. Christopher L. Hart, Chris Hart & Partners, Inc.

Subscribed and sworn to before me this

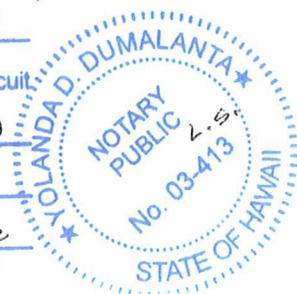
7TH day of AUGUST, 2012

Yolanda D. Dumalanta
YOLANDA D. DUMALANTA
Notary Public, Second Judicial Circuit
State of Hawaii

My commission expires: JULY 27, 2015



| | | | |
|-------------------|---|----------|-----------------|
| Document Date: | <u>UNDATED</u> | # Pages: | <u>1</u> |
| Notary Name: | <u>YOLANDA DUMALANTA Second Circuit</u> | | |
| Doc. Description: | <u>REQUEST FOR A COMMUNITY PLAN AMENDMENT, AND CHANGE IN ZONING</u> | | |
| Notary Signature: | <i>Yolanda D. Dumalanta</i> | Date: | <u>08/07/12</u> |



July 9, 2012

Mr. William Spence, Director
Department of Planning
County of Maui
250 South High Street
Wailuku, Maui, Hawaii 96793

Re: Request for a Community Plan Amendment, and Change in Zoning and any other required land use permit, for property that comprises a portion of the proposed Maui Research & Technology Park Master Plan Update, situated east of Piilani Highway, Kihei, Maui, Hawaii; **TMK Parcel No: (2) 2-2-024:00370007**

Dear Mr. Spence:

This letter authorizes Maui R&T Partners, Inc. and its agent, Chris Hart & Partners, Inc., on behalf of **B E L LLC.**, Owner of the above-referenced property, to apply for a Community Plan Amendment, Change in Zoning, and any other required land use permit, for property included in the Maui Research & Technology Park Master Plan Update, situated east of Piilani Highway, Kihei, Maui, Hawaii; **TMK Parcel Nos. (2) 2-2-024:00370007**

Very truly yours,

Jim Tantisio
for **BEL LLC**
Property Owner

Cc. Mr. Christopher L. Hart, Chris Hart & Partners, Inc.

Subscribed and sworn to before me this

7TH day of AUGUST, 2012

Yolanda D. Dumalanta
YOLANDA D. DUMALANTA
Notary Public, Second Judicial Circuit
State of Hawaii

JULY 27, 2015

My commission expires: _____

| | |
|---|-------------------------|
| Document Date: <u>UNDATED</u> | # Pages: <u>1</u> |
| Notary Name: YOLANDA DUMALANTA Second Circuit | |
| Doc. Description: <u>REQUEST FOR A COMMUNITY PLAN AMENDMENT, AND CHANGE IN ZONING</u> | |
| <i>Yolanda D. Dumalanta</i> Notary Signature | <u>08/07/12</u> Date |



October 10, 2012

Mr. William Spence, Director
Department of Planning
County of Maui
250 South High Street
Wailuku, Maui, Hawaii 96793

Re: Request for a Community Plan Amendment, and Change in Zoning and any other required land use permit, for property that comprises a portion of the proposed Maui Research & Technology Park Master Plan Update, situated east of Piilani Highway, Kihei, Maui, Hawaii; **TMK Parcel No: (2) 2-2-024-:002**

Dear Mr. Spence:

This letter authorizes Maui R&T Partners, Inc. and its agent, Chris Hart & Partners, Inc., on behalf of the **High Technology Development Corporation, an agency of the State of Hawaii**, owner of the above-referenced property, to apply for a Community Plan Amendment, Change in Zoning, and any other required land use permit, for property included in the Maui Research & Technology Park Master Plan Update, situated east of Piilani Highway, Kihei, Maui, Hawaii; **TMK Parcel Nos. (2) 2-2-024:002**

Very truly yours,

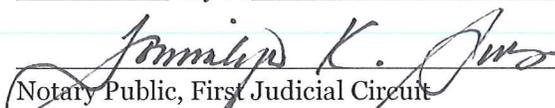


Yuka Nagashima
High Technology Development Corporation

Cc. Mr. Christopher L. Hart, Chris Hart & Partners, Inc.

Subscribed and sworn to before me this

16th day of October, 2012


Notary Public, First Judicial Circuit
State of Hawaii

My Commission expires on 9/22/2014

December 10, 2012

Mr. William Spence, Director
Department of Planning
County of Maui
250 South High Street
Wailuku, Maui, Hawaii 96793

Re: Request for a Community Plan Amendment, and Change in Zoning and any other required land use permit, for property that comprises a portion of the proposed Maui Research & Technology Park Master Plan Update, situated east of Piilani Highway, Kihei, Maui, Hawaii; **TMK Parcel No: (2) 2-2-024:005 & 6**

Dear Mr. Spence:

This letter authorizes Maui R&T Partners, Inc. and its agent, Chris Hart & Partners, Inc., on behalf of **Kahu Ohana LLC** Owner of the above-referenced property, to apply for a Community Plan Amendment, Change in Zoning, and any other required land use permit, for property included in the Maui Research & Technology Park Master Plan Update, situated east of Piilani Highway, Kihei, Maui, Hawaii; **TMK Parcel Nos. (2) 2-2-024:005 & 6**

Very truly yours,

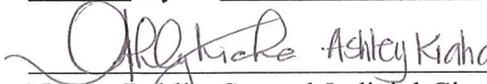


Garrett Marrero
Property Owner

Cc. Mr. Jordan Hart, Chris Hart & Partners, Inc.

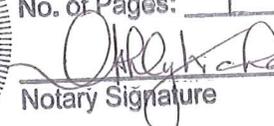
Subscribed and sworn to before me this

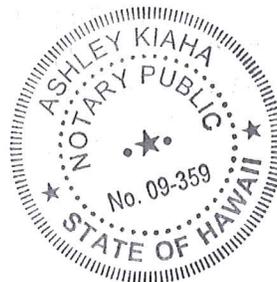
11 day of December, 2012


Notary Public, Second Judicial Circuit
State of Hawaii

My commission expires: August 23, 2013



NOTARY PUBLIC CERTIFICATION
Ashley Kiaha Second Judicial Circuit
Doc. Description: Authorization
Letter
No. of Pages: 1 Date of Doc. 12/11/12

Notary Signature 12/11/12
Date





MAUI PARK PLAZA, LLC

December 10, 2012

Mr. William Spence, Director
Department of Planning
County of Maui
250 South High Street
Wailuku, Maui, Hawaii 96793

Re: Request for a Community Plan Amendment, and Change in Zoning and any other required land use permit, for property that comprises a portion of the proposed Maui Research & Technology Park Master Plan Update, situated east of Piilani Highway, Kihei, Maui, Hawaii; **TMK Parcel Nos: (2) 2-2-024:00370002-5, 8-14, & 16-20.**

Dear Mr. Spence:

This letter authorizes Maui R&T Partners, Inc. and its agent, Chris Hart & Partners, Inc., on behalf of **Maui Park Plaza LLC.**, Owner of the above-referenced property, to apply for a Community Plan Amendment, Change in Zoning, and any other required land use permit, for property included in the Maui Research & Technology Park Master Plan Update, situated east of Piilani Highway, Kihei, Maui, Hawaii; **TMK Parcel Nos. (2) 2-2-024:00370002-5, 8-14, & 16-20.**

Very truly yours,

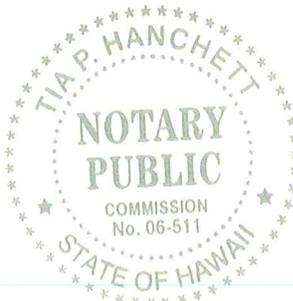
Property Owner

Cc. Mr. Jordan Hart, Chris Hart & Partners, Inc.

Subscribed and sworn to before me this

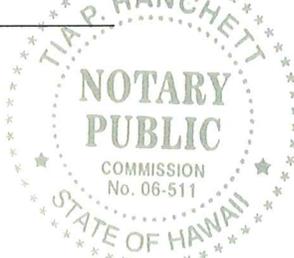
10th day of December, 2012

Notary Public, Second Judicial Circuit
State of Hawaii



TIA P. HANCHETT
My commission expires 9/3/2014

My commission expires: _____



Doc. Date: 12/10/12 # Pages: 1

TIA P. HANCHETT, Notary Public, Second Circuit

Doc. Description: Letter of Authorization

MRTIP for MPP LLC

12/10/12
Date

July 9, 2012

Mr. William Spence, Director
Department of Planning
County of Maui
250 South High Street
Wailuku, Maui, Hawaii 96793

Re: Request for a Community Plan Amendment, and Change in Zoning and any other required land use permit, for property that comprises a portion of the proposed Maui Research & Technology Park Master Plan Update, situated east of Piilani Highway, Kihei, Maui, Hawaii; **TMK Parcel No: (2) 2-2-024:0034**

Dear Mr. Spence:

This letter authorizes Maui R&T Partners, Inc. and its agent, Chris Hart & Partners, Inc., on behalf of **Maui Economic Development Board, Inc.**, Owner of the above-referenced property, to apply for a Community Plan Amendment, Change in Zoning, and any other required land use permit, for property included in the Maui Research & Technology Park Master Plan Update, situated east of Piilani Highway, Kihei, Maui, Hawaii; **TMK Parcel Nos. (2) 2-2-024:0034**

Very truly yours,

[Handwritten Signature]

Chris Hart, Pres + CEO
Property Owner

Cc. Mr. Christopher L. Hart, Chris Hart & Partners, Inc.

[Handwritten Signature]

Chris Hart, Vice President

Subscribed and sworn to before me this

13th day of July, 2012

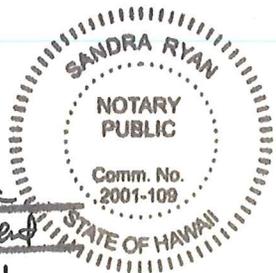
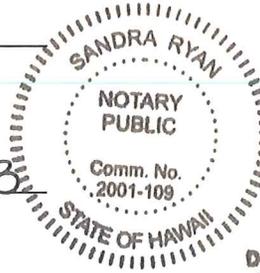
[Handwritten Signature]

Maui Economic Development Board, Inc.

[Handwritten Signature]

Sandra Ryan
Notary Public, Second Judicial Circuit
State of Hawaii

My commission expires: 4/1/2013



Doc. Description: Request for a Community Plan Amendment
Doc. Date: 7/19/12 No. Pages: 1
[Handwritten Signature] and *[Handwritten Signature]*

Notary Printed Name Not. Circuit

Dorvin D. Leis
Double P Partners
2265 Hoonee Place, Suite 110
Honolulu, Hawaii 96819

RECEIVED
AUG 08 2012
PACIFIC RIM LAND, INC
MAUI - MAUI

LETTER OF TRANSMITTAL

DATE: August 7th, 2012

TO: Steve Perkins
Pacific Rim Land, Inc.
Maui Research & Technology Park
P.O. Box 220
Kihei, Hawaii 96753

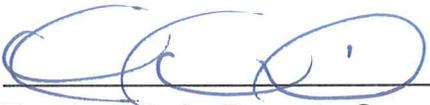
RE: Pacific Rim Land, Inc.
Letter Requesting Community Plan Amendment & Change In Zoning

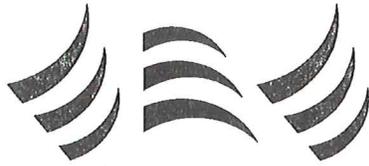
| | | |
|-------------------------|------|----------------------|
| We are sending you via: | Mail | The following items: |
|-------------------------|------|----------------------|

| COPIES | ITEM | Description |
|--------|------|---|
| 1 | | Executed Request by Property Owner (Dorvin D. Leis) for a Community Plan Amendment and Change In Zoning |
| | | |
| | | |
| | | |
| | | |
| | | |

| |
|---|
| COMMENTS: Returning per your request. |
| |
| |

| |
|---|
| CC: Corres. File, DDL Jade L. – Email |
|---|

SIGNED: 
Dorvin D. Leis, Property Owner



P A C I F I C R I M L A N D, I N C.

July 9, 2012

Mr. Dorvin Leis
Double P Partners
2265 Hoohee Pl, #110
Honolulu, HI 96819

Dear Mr. Leis,

Maui R&T Partners, LLC and Haleakala Ranch, owners of approximately 414 acres of the developed and undeveloped lands comprising the Maui Research & Technology Park, recently hired internationally renowned urban designer, Calthorpe & Associates, to prepare an update of the Park's master plan.

The purpose of the update is to position the Park to better service the needs of current and future users of the Park. The Park will accomplish its objective by incorporating greater flexibility into its current land use controls. The Park will offer a greater diversity of lot sizes - from small to very large lots - together with the opportunity for more flexible building space. The Park will also embrace mixed-use development in order to offer greater convenience and a more robust sense of community for employees.

In order to realize the Master Plan vision, Maui R&T Partners, LLC and Haleakala Ranch recently filed a Change in Zoning and Community Plan Amendment for all parcels within the Park. Since you are a landowner within the Park your parcel will be impacted by the changes being proposed. The changes, as they would affect your parcel, are intended to provide greater flexibility in the types of uses and development standards that are permitted. In no way will the changes prohibit the development of your parcel pursuant to current zoning standards. However, the proposed changes will give existing owners greater flexibility in the types of uses and development standards that may apply to their property. For example, the following types of changes are proposed:

- **Permitted uses.** The current zoning ordinance, MCC 19.33 "Kihei Research & Technology Park District", strictly defines "*high technology*" to a rather narrow and limited list of permitted uses such as pharmaceutical, biological, medical and agricultural research and production facilities. The proposed changes will broaden the definition to include both high technology and other "knowledge industry" uses. Knowledge industry uses, as defined in the Master Plan, are characterized by highly-skilled workers in fields such as science and research, biotechnology, clean technology, information technology, disaster mitigation, education, healthcare and medicine, media production, and professional services and similar knowledge based organizations.
- **Minimum Lot Sizes.** The minimum lot size within the Park is currently two (2) acres. The proposed changes will reduce the minimum lot size to 6,000 square feet to attract a greater diversity of potential users. The proposed minimum lot size is more in line with

existing commercial and light industrial designations that exist elsewhere in Maui County.

- **Setbacks.** The current setback requirements range from 20- to 60-feet. Such expansive setback requirements add significantly to the cost of development. The proposed changes will reduce setback requirements to 0 to 15 feet, depending upon the location of the property, which is more characteristic of setback requirements for existing commercial districts.

To include your parcel along with those owned by Maui R&T Partners and Haleakala Ranch, we are required to obtain your written authorization prior to proceeding with the community plan amendment and change in zoning. We believe that by including your parcel in the overall request, you will benefit significantly as a landowner and the Park will benefit by having a more unified "sense of place" and vision for the future.

I have included a letter of authorization that allows our consultants, Chris Hart & Partners, to include your parcel in the update. Please return the letter with your notarized signature as soon possible. If more convenient for you, we are able to notarize the letter at our office as well.

Please let me know if you have any questions or concerns. I'm happy to meet with you to discuss the update and the process.

Sincerely,



Steve Perkins
Project Coordinator
Maui Research & Technology Park

July 9, 2012

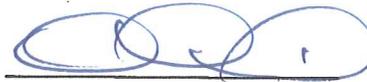
Mr. William Spence, Director
Department of Planning
County of Maui
250 South High Street
Wailuku, Maui, Hawaii 96793

Re: Request for a Community Plan Amendment, and Change in Zoning and any other required land use permit, for property that comprises a portion of the proposed Maui Research & Technology Park Master Plan Update, situated east of Piilani Highway, Kihei, Maui, Hawaii; TMK Parcel No: (2) 2-2-024:007

Dear Mr. Spence:

This letter authorizes Maui R&T Partners, Inc. and its agent, Chris Hart & Partners, Inc., on behalf of Double P Partners Owner of the above-referenced property, to apply for a Community Plan Amendment, Change in Zoning, and any other required land use permit, for property included in the Maui Research & Technology Park Master Plan Update, situated east of Piilani Highway, Kihei, Maui, Hawaii; TMK Parcel Nos. (2) 2-2-024:007

Very truly yours,



Property Owner

Cc. Mr. Christopher L. Hart, Chris Hart & Partners, Inc.

Subscribed and sworn to before me this

7th day of August, 2012



Notary Public, Second Judicial Circuit
State of Hawaii Tracie K. Endo No. 06-236

My commission expires: 04/30/2014

Doc. Date: 8/7/12 # Pages: 3
Tracie K. Endo Second Circuit
Doc. Description Pacific Rim Land
Inc. Community Plan Amendment
& Change In Zoning

 8/7/12
Notary Signature Date

NOTARY CERTIFICATION



July 9, 2012

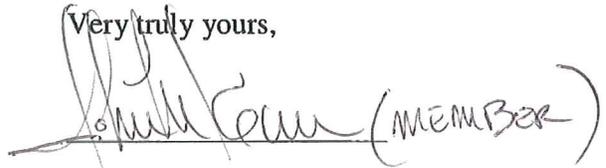
Mr. William Spence, Director
Department of Planning
County of Maui
250 South High Street
Wailuku, Maui, Hawaii 96793

Re: Request for a Community Plan Amendment, and Change in Zoning and any other required land use permit, for property that comprises a portion of the proposed Maui Research & Technology Park Master Plan Update, situated east of Piilani Highway, Kihei, Maui, Hawaii; TMK Parcel No: (2) 2-2-024:0042

Dear Mr. Spence:

This letter authorizes Maui R&T Partners, Inc. and its agent, Chris Hart & Partners, Inc., on behalf of Maui Flex Center LLC., Owner of the above-referenced property, to apply for a Community Plan Amendment, Change in Zoning, and any other required land use permit, for property included in the Maui Research & Technology Park Master Plan Update, situated east of Piilani Highway, Kihei, Maui, Hawaii; TMK Parcel Nos. (2) 2-2-024:0042

Very truly yours,

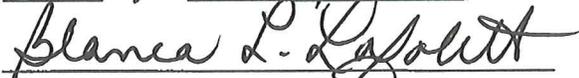


Property Owner

Cc. Mr. Christopher L. Hart, Chris Hart & Partners, Inc.

Subscribed and sworn to before me this

30 day of JULY, 2012



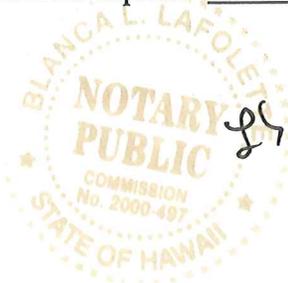
Notary Public, Second Judicial Circuit
State of Hawaii

Doc. Date: 7/9/12 # Pages: 1

BLANCA L. LAPOLETTE, Notary Public, Second Circuit

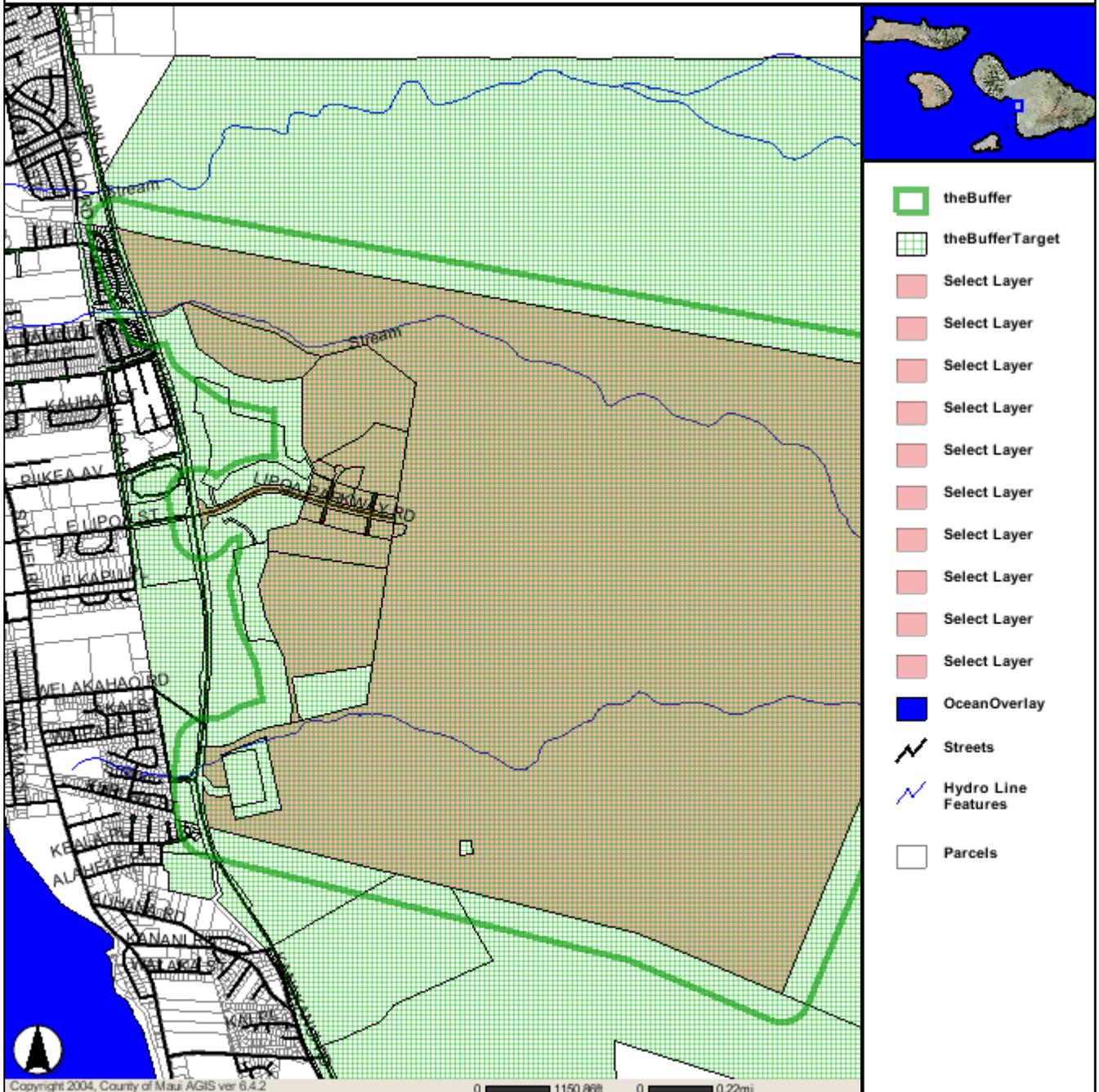
Doc. Description: Letter of authorization
Blanca L. LaPolette 7/30/12
Notary Signature

My commission expires: 10-15-12



Chapter 5
*OWNERS AND
LESSEES OF
PARCELS WITHIN
500 FEET OF THE
SUBJECT
PROPERTY*

Map Title



Copyright 2004, County of Maui AGIS ver 6.4.2 0 1150.86ft 0 0.22mi

Refer to the Accela GIS Administrators Guide for instructions on how to set the disclaimer text displayed in this area.



| TMK | CPR | OWNER | C/O | ADDRESS | City/ State/ Zip | Country |
|-----------|-----|--|--|----------------------------|-----------------------------------|---------|
| 222002001 | 0 | HALEAKALA RANCH COMPANY | | 529 KEALALOA AVENUE | MAKAWAO HI 96768 | |
| 222002014 | 0 | SAKUGAWA,JAMES C. | | RR1 BOX 650 | KULA HI 96790 | |
| 222002069 | 0 | MONSANTO COMPANY | C/O TAX DEPARTMENT - G5EE | 800 N LINDBERGH BLVD, | SAINT LOUIS MO 63167 | |
| 222002072 | 0 | HOPE CHAPEL | HOPE CHAPEL- C FRANKS | 300 E WELAKAHAO RD | KIHEI HI 96753 | |
| 222024001 | 0 | BANK OF HAWAII TRS | C/O BNY WESTERN TRUST CO., SUCCEOR TTE | 700 S. FLOWER ST, 5TH FLO | CLOS ANGELES CA 90017 | |
| 222024001 | 0 | THE REGENTS OF THE UNIVERSITY OF NEW | C/O REAL ESTATE OFFICE | 2811 CAMPUS BLVD NE MSC | ALBUQUERQUE NM 87131 0001 | |
| 222024003 | 0 | HANKAL,MICHAEL TRUST | | 3150 WAILEA ALANUI #3803 | KIHEI HI 96753 | |
| 222024004 | 0 | MAUI R & T PARTNERS LLC | | 1999 AVENUE OF THE STARS | LOS ANGELES CA 90067 | |
| 222024005 | 0 | BANK OF HAWAII | C/O GARRETT W MARRERO, KAHU OHANA LLC | 910 HONOAPIILANI HWY #55 | LAHAINA HI 96761 | |
| 222024006 | 0 | FIVE SIX LLC | | 77 HOOKELE ST #302 | KAHULUI HI 96732 | |
| 222024007 | 0 | DOUBLE P PARTNERS | ATTN HAWAII PREMIER REALTY | 2265 HOOHEE PL, #110 | HONOLULU HI 96819 | |
| 222024008 | 0 | MAUI R & T PARTNERS LLC | | 1999 AVENUE OF THE STARS | LOS ANGELES CA 90067 | |
| 222024009 | 0 | MAUI R & T PARTNERS LLC-UND INT | | 1999 AVENUE OF THE STARS | LOS ANGELES CA 90067 | |
| 222024012 | 0 | ELLEAIR MAUI GOLF CLUB, LLC | C/O MR NOBUAKI KONO | 1345 PIILANI HWY | KIHEI HI 96753 | |
| 222024013 | 0 | ELLEAIR MAUI GOLF CLUB, LLC | C/O MR NOBUAKI KONO | 1345 PIILANI HWY | KIHEI HI 96753 | |
| 222024014 | 0 | MAUI R & T PARTNERS LLC | C/O WOODRIDGE CAPITAL PARTNERS | 1999 AVENUE OF THE STARS | LOS ANGELES CA 90067 | |
| 222024015 | 0 | MAUI R & T PARTNERS LLC | C/O WOODRIDGE CAPITAL PARTNERS | 1999 AVE OF THE STARS | STELOS ANGELES CA 90067 | |
| 222024016 | 0 | MAUI R & T PARTNERS LLC | C/O WOODRIDGE CAPITAL PARTNERS | 1999 AVENUE OF THE STARS | LOS ANGELES CA 90067 | |
| 222024017 | 0 | MAUI R & T PARTNERS LLC | C/O WOODRIDGE CAPITAL PARTNERS | 1999 AVENUE OF THE STARS | LOS ANGELES CA 90067 | |
| 222024018 | 0 | MAUI R & T PARTNERS LLC | | 1999 AVENUE OF THE STARS | LOS ANGELES CA 90067 | |
| 222024022 | 0 | PIILANI GARDENS LLC | | 150 MANINO CIRCLE | KIHEI HI 96753 | |
| 222024026 | 0 | COUNTY OF MAUI | | 200 S HIGH ST | WAILUKU HI 96793 | |
| 222024030 | 0 | DWELLE,DAVID WARREN | | 12970 EARHART AVE | AUBURN CA 95602 | |
| 222024031 | 0 | UNITED STATES POSTAL SERVICE | C/O PACIFIC FACILITIES SERVICE OFFICE | 395 OYSTER POINT BLVD, S | SOUTH SAN FRANCISCO CA 94099 0300 | |
| 222024032 | 0 | MAUI R & T PARTNERS | | 1999 AVENUE OF THE STARS | LOS ANGELES CA 90067 | |
| 222024033 | 0 | NU'U AINA - CONDO MASTER | C/O MAUI HIGHLANDS PROPERTIES LLC | 3220 S KIHEI RD | KIHEI HI 96753 | |
| 222024033 | 1 | MAUI HIGHLANDS PROPERTIES LLC | | 3220 S KIHEI RD | KIHEI HI 96753 | |
| 222024033 | 2 | MAUI HIGHLANDS PROPERTIES LLC | | 3220 S KIHEI RD | KIHEI HI 96753 | |
| 222024033 | 3 | MAUI HIGHLANDS PROPERTIES LLC | | 3220 S KIHEI RD | KIHEI HI 96753 | |
| 222024033 | 4 | MAUI HIGHLANDS PROPERTIES LLC | | 3220 S KIHEI RD | KIHEI HI 96753 | |
| 222024033 | 5 | MAUI HIGHLANDS PROPERTIES LLC | | 3220 S KIHEI RD | KIHEI HI 96753 | |
| 222024033 | 6 | MAUI HIGHLANDS PROPERTIES LLC | | 3220 S KIHEI RD | KIHEI HI 96753 | |
| 222024033 | 7 | MAUI HIGHLANDS PROPERTIES LLC | | 3220 S KIHEI RD | KIHEI HI 96753 | |
| 222024033 | 8 | MAUI HIGHLANDS PROPERTIES LLC | | 3220 S KIHEI RD | KIHEI HI 96753 | |
| 222024033 | 9 | MAUI HIGHLANDS PROPERTIES LLC | | 3220 S KIHEI RD | KIHEI HI 96753 | |
| 222024033 | 10 | MAUI HIGHLANDS PROPERTIES LLC | | 3220 S KIHEI RD | KIHEI HI 96753 | |
| 222024033 | 11 | MAUI HIGHLANDS PROPERTIES LLC | | 3220 S KIHEI RD | KIHEI HI 96753 | |
| 222024033 | 12 | MAUI HIGHLANDS PROPERTIES LLC | | 3220 S KIHEI RD | KIHEI HI 96753 | |
| 222024033 | 13 | MAUI HIGHLANDS PROPERTIES LLC | | 3220 S KIHEI RD | KIHEI HI 96753 | |
| 222024033 | 14 | MAUI HIGHLANDS PROPERTIES LLC | | 3220 S KIHEI RD | KIHEI HI 96753 | |
| 222024033 | 15 | MAUI HIGHLANDS PROPERTIES LLC | | 3220 S KIHEI RD | KIHEI HI 96753 | |
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| 222024033 | 17 | MAUI HIGHLANDS PROPERTIES LLC | | 3220 S KIHEI RD | KIHEI HI 96753 | |
| 222024033 | 18 | MAUI HIGHLANDS PROPERTIES LLC | | 3220 S KIHEI RD | KIHEI HI 96753 | |
| 222024033 | 19 | MAUI HIGHLANDS PROPERTIES LLC | | 3220 S KIHEI RD | KIHEI HI 96753 | |
| 222024033 | 20 | MAUI HIGHLANDS PROPERTIES LLC | | 3220 S KIHEI RD | KIHEI HI 96753 | |
| 222024033 | 21 | MAUI HIGHLANDS PROPERTIES LLC | | 3220 S KIHEI RD | KIHEI HI 96753 | |
| 222024033 | 22 | MAUI HIGHLANDS PROPERTIES LLC | | 3220 S KIHEI RD | KIHEI HI 96753 | |
| 222024033 | 23 | MAUI HIGHLANDS PROPERTIES LLC | | 3220 S KIHEI RD | KIHEI HI 96753 | |
| 222024033 | 24 | MAUI HIGHLANDS PROPERTIES LLC | | 3220 S KIHEI RD | KIHEI HI 96753 | |
| 222024033 | 25 | MAUI HIGHLANDS PROPERTIES LLC | | 3220 S KIHEI RD | KIHEI HI 96753 | |
| 222024033 | 26 | MAUI HIGHLANDS PROPERTIES LLC | | 3220 S KIHEI RD | KIHEI HI 96753 | |
| 222024034 | 0 | MAUI ECONOMIC DEVELOPMENT BOARD, INC. | | 1305 N HOLOPONO ST STE 1 | KIHEI HI 96753 | |
| 222024035 | 0 | HOKULANI GOLF VILLAS - CONDO MASTER | C/O RAINEY,TIMOTHY J/JULIE | 5660 CHRISTMAS LAKE PT | EXCELSIOR MN 55331 | |
| 222024035 | 1 | LEHMANN,MARC AUREL | | 44 KANANI RD APT #I-205 | KIHEI HI 96753 | |
| 222024035 | 2 | RIZZARDO,FRANCESCO | C/O RIZZARDO, FRANCESCO/ALMERINA | 6456 MONCK PARK RD | MERRITT, BRITISH COLUMBIA V1K 0A1 | CANADA |
| 222024035 | 3 | BOEHLJE,LINDA L REVOC TRUST | C/O LINDA BOEHLJE | 580 HALELE'A ST | KIHEI HI 96753 | |
| 222024035 | 4 | WAGNER,CLYDE ALBERT | | 650 HALELEA ST #4 | KIHEI HI 96753 | |
| 222024035 | 5 | I DID THE MATH, LLC | | 1645 S BEVERLY CT | CHANDLER AZ 85286 | |
| 222024035 | 6 | GERMANO,RICHARD D | | 104 WATER MILL LN | MEDIA PA 19063 | |
| 222024035 | 7 | SUSSKIND,ROBERTA | | 1935 HIHIMANU ST #7 | KIHEI HI 96753 | |
| 222024035 | 8 | GOODFELLOW,JAMES S/DENISE D MAIN TRUST | C/O J STEPHEN GOODFELLOW | PO BOX 598 | WENATCHEE WA 98807 | |
| 222024035 | 9 | SIGNATURE DEVELOPMENT OF HAWAII LLC | SIGNATURE DEVELOPMENT OF HI, LLC | 375 HUKU LII ST, SUITE 205 | KIHEI HI 96753 | |
| 222024035 | 10 | SIGNATURE DEVELOPMENT OF HAWAII LLC | SIGNATURE DEVELOPMENT OF HI, LLC | 375 HUKU LII ST, SUITE 205 | KIHEI HI 96753 | |

| | | | | | |
|-----------|--|----------------------------------|----------------------------|---------------------------|--------|
| 222024035 | 11 DEFORD,ANTHONY | | 752 WANYANDI RD, SW | EDMONTON, AB T5T 4K8 | CANADA |
| 222024035 | 12 DEFORD,ANTHONY | | 752 WANYANDI RD NW | EDMONTON, AL T5T 4K8 | CANADA |
| 222024035 | 13 BAJER,DOUGLAS MARTIN | | 32 MOUNT DOUGLAS POINT | CALGARY, AB T2Z 3J6 | CANADA |
| 222024035 | 14 EZERSKY,ALEX P | | 1511 HIHIMANU ST #14 | KIHEI HI 96753 | |
| 222024035 | 15 SIGNATURE DEVELOPMENT OF HAWAII LLC | SIGNATURE DEVELOPMENT OF HI, LLC | 375 HUKU LII ST, SUITE 205 | KIHEI HI 96753 | |
| 222024035 | 16 SIGNATURE DEVELOPMENT OF HAWAII LLC | SIGNATURE DEVELOPMENT OF HI, LLC | 375 HUKU LII ST, SUITE 205 | KIHEI HI 96753 | |
| 222024035 | 17 DEVJI,KURBANALI | C/O DEVJI, KURBANALI/RASHIDA | 617 TODD LINK | EDMONTON, ALBERTA T6K 3C5 | CANADA |
| 222024035 | 18 SIGNATURE DEVELOPMENT OF HAWAII LLC | C/O GOLDBERG.HONEY L | 155 N HARBOR DR, APT 4703 | CHICAGO IL 60601 | |
| 222024035 | 19 BISSETT,DAVID E | | 150 AUBURN SOUND VIEW ST | CALGARY,AB T3M 0E2 | CANADA |
| 222024035 | 20 DORAN,JAMES R III | | 1133 HIHIMANU ST | KIHEI HI 96753 | |
| 222024035 | 21 DUNN,WILLIAM C | | 220 ORMAND DR | EDMONTON, AB T6R 1L7 | CANADA |
| 222024035 | 22 MCCOLMAN,ERNEST DUNCAN | C/O MCCOLMAN,E & M/DEACON,C | 3028-43A AVE | EDMONTON, ALTA T6T 1C9 | CANADA |
| 222024035 | 23 OSWALD,STEPHEN C TRUST | OSWALD,STEPHEN C TRS | 933 HIHIMANU ST | KIHEI HI 96753 | |
| 222024035 | 24 WHIPPLE,HUGH W | | 465 PERSIMMON DR | SAINT CHARLES IL 60174 | |
| 222024035 | 25 RAINEY,TIMOTHY J | | 5660 CHRISTMAS LAKE PT | EXCELSIOR MN 55331 | |
| 222024035 | 26 TRUDERUNG,HARRY WILLIAM | | 505 SILVERTIP POINTE | CANMORE,AB T1W 3J1 | CANADA |
| 222024035 | 27 KAISER,DANIEL K | | 10117 NW LANGWORTHY TER | PORTLAND OR 97229 | |
| 222024035 | 28 PETRILLA,DAVID & TERRI FAM TRUST | | P.O. BOX 6931 | INCLINE VILLAGE NV 89450 | |
| 222024035 | 29 ELY,GARY G | | 3217 S QUINIMOSE RD | LIBERTY LAKE WA 99019 | |
| 222024035 | 30 NEWPORT,WILLIAM M TRUST | | 5898 SHALLOW WATER LN | BARGERSVILLE IN 46106 | |
| 222024035 | 31 COYE,HOWARD B & MARY P BASILE TRUST | | 435 HIHIMANU ST 31 | KIHEI HI 96753 | |
| 222024035 | 32 EVERHART,CATHERINE LAVERNE LIVING TRUST | EVERHART,CATHERINE L/R E TRS | 361 HIHIMANU ST, UNIT 32 | KIHEI HI 96753 | |
| 222024035 | 33 SIGNATURE DEVELOPMENT OF HAWAII LLC | SIGNATURE DEVELOPMENT OF HI, LLC | 375 HUKU LII ST, SUITE 205 | KIHEI HI 96753 | |
| 222024035 | 34 SIGNATURE DEVELOPMENT OF HAWAII LLC | SIGNATURE DEVELOPMENT OF HI, LLC | 375 HUKU LII ST, SUITE 205 | KIHEI HI 96753 | |
| 222024035 | 35 FANELLA,JAMES A | | 522 HIHIMANU ST | KIHEI HI 96753 | |
| 222024035 | 36 SIGNATURE DEVELOPMENT OF HAWAII LLC | SIGNATURE DEVELOPMENT OF HI, LLC | 375 HUKU LII ST, SUITE 205 | KIHEI HI 96753 | |
| 222024035 | 37 SIGNATURE DEVELOPMENT OF HAWAII LLC | SIGNATURE DEVELOPMENT OF HI, LLC | 375 HUKU LII ST, SUITE 205 | KIHEI HI 96753 | |
| 222024035 | 38 SIGNATURE DEVELOPMENT OF HAWAII LLC | SIGNATURE DEVELOPMENT OF HI, LLC | 375 HUKU LII ST, SUITE 205 | KIHEI HI 96753 | |
| 222024035 | 39 SIGNATURE DEVELOPMENT OF HAWAII LLC | SIGNATURE DEVELOPMENT OF HI, LLC | 375 HUKU LII ST, SUITE 205 | KIHEI HI 96753 | |
| 222024035 | 40 SIGNATURE DEVELOPMENT OF HAWAII LLC | SIGNATURE DEVELOPMENT OF HI, LLC | 375 HUKU LII ST, SUITE 205 | KIHEI HI 96753 | |
| 222024035 | 41 SIGNATURE DEVELOPMENT OF HAWAII LLC | SIGNATURE DEVELOPMENT OF HI, LLC | 375 HUKU LII ST, SUITE 205 | KIHEI HI 96753 | |
| 222024035 | 42 SIGNATURE DEVELOPMENT OF HAWAII LLC | SIGNATURE DEVELOPMENT OF HI, LLC | 375 HUKU LII ST, SUITE 205 | KIHEI HI 96753 | |
| 222024035 | 43 SIGNATURE DEVELOPMENT OF HAWAII LLC | SIGNATURE DEVELOPMENT OF HI, LLC | 375 HUKU LII ST, SUITE 205 | KIHEI HI 96753 | |
| 222024035 | 44 SIGNATURE DEVELOPMENT OF HAWAII LLC | SIGNATURE DEVELOPMENT OF HI, LLC | 375 HUKU LII ST, SUITE 205 | KIHEI HI 96753 | |
| 222024035 | 45 SIGNATURE DEVELOPMENT OF HAWAII LLC | SIGNATURE DEVELOPMENT OF HI, LLC | 375 HUKU LII ST, SUITE 205 | KIHEI HI 96753 | |
| 222024035 | 46 SIGNATURE DEVELOPMENT OF HAWAII LLC | SIGNATURE DEVELOPMENT OF HI, LLC | 375 HUKU LII ST, SUITE 205 | KIHEI HI 96753 | |
| 222024035 | 47 SIGNATURE DEVELOPMENT OF HAWAII LLC | SIGNATURE DEVELOPMENT OF HI, LLC | 375 HUKU LII ST, SUITE 205 | KIHEI HI 96753 | |
| 222024035 | 48 SIGNATURE DEVELOPMENT OF HAWAII LLC | SIGNATURE DEVELOPMENT OF HI, LLC | 375 HUKU LII ST, SUITE 205 | KIHEI HI 96753 | |
| 222024035 | 49 SIGNATURE DEVELOPMENT OF HAWAII LLC | SIGNATURE DEVELOPMENT OF HI, LLC | 375 HUKU LII ST, SUITE 205 | KIHEI HI 96753 | |
| 222024035 | 50 SIGNATURE DEVELOPMENT OF HAWAII LLC | SIGNATURE DEVELOPMENT OF HI, LLC | 375 HUKU LII ST, SUITE 205 | KIHEI HI 96753 | |
| 222024035 | 51 SIGNATURE DEVELOPMENT OF HAWAII LLC | SIGNATURE DEVELOPMENT OF HI, LLC | 375 HUKU LII ST, SUITE 205 | KIHEI HI 96753 | |
| 222024035 | 52 SIGNATURE DEVELOPMENT OF HAWAII LLC | SIGNATURE DEVELOPMENT OF HI, LLC | 375 HUKU LII ST, SUITE 205 | KIHEI HI 96753 | |
| 222024035 | 53 SIGNATURE DEVELOPMENT OF HAWAII LLC | SIGNATURE DEVELOPMENT OF HI, LLC | 375 HUKU LII ST, SUITE 205 | KIHEI HI 96753 | |
| 222024035 | 54 SIGNATURE DEVELOPMENT OF HAWAII LLC | SIGNATURE DEVELOPMENT OF HI, LLC | 375 HUKU LII ST, SUITE 205 | KIHEI HI 96753 | |
| 222024035 | 55 SIGNATURE DEVELOPMENT OF HAWAII LLC | SIGNATURE DEVELOPMENT OF HI, LLC | 375 HUKU LII ST, SUITE 205 | KIHEI HI 96753 | |
| 222024035 | 56 SIGNATURE DEVELOPMENT OF HAWAII LLC | SIGNATURE DEVELOPMENT OF HI, LLC | 375 HUKU LII ST, SUITE 205 | KIHEI HI 96753 | |
| 222024035 | 57 SIGNATURE DEVELOPMENT OF HAWAII LLC | SIGNATURE DEVELOPMENT OF HI, LLC | 375 HUKU LII ST, SUITE 205 | KIHEI HI 96753 | |
| 222024035 | 58 SIGNATURE DEVELOPMENT OF HAWAII LLC | SIGNATURE DEVELOPMENT OF HI, LLC | 375 HUKU LII ST, SUITE 205 | KIHEI HI 96753 | |
| 222024035 | 59 SIGNATURE DEVELOPMENT OF HAWAII LLC | SIGNATURE DEVELOPMENT OF HI, LLC | 375 HUKU LII ST, SUITE 205 | KIHEI HI 96753 | |
| 222024035 | 60 SIGNATURE DEVELOPMENT OF HAWAII LLC | SIGNATURE DEVELOPMENT OF HI, LLC | 375 HUKU LII ST, SUITE 205 | KIHEI HI 96753 | |
| 222024035 | 61 SIGNATURE DEVELOPMENT OF HAWAII LLC | SIGNATURE DEVELOPMENT OF HI, LLC | 375 HUKU LII ST, SUITE 205 | KIHEI HI 96753 | |
| 222024035 | 62 SIGNATURE DEVELOPMENT OF HAWAII LLC | SIGNATURE DEVELOPMENT OF HI, LLC | 375 HUKU LII ST, SUITE 205 | KIHEI HI 96753 | |
| 222024035 | 63 SIGNATURE DEVELOPMENT OF HAWAII LLC | SIGNATURE DEVELOPMENT OF HI, LLC | 375 HUKU LII ST, SUITE 205 | KIHEI HI 96753 | |
| 222024035 | 64 SIGNATURE DEVELOPMENT OF HAWAII LLC | SIGNATURE DEVELOPMENT OF HI, LLC | 375 HUKU LII ST, SUITE 205 | KIHEI HI 96753 | |
| 222024035 | 65 SIGNATURE DEVELOPMENT OF HAWAII LLC | SIGNATURE DEVELOPMENT OF HI, LLC | 375 HUKU LII ST, SUITE 205 | KIHEI HI 96753 | |
| 222024035 | 66 SIGNATURE DEVELOPMENT OF HAWAII LLC | SIGNATURE DEVELOPMENT OF HI, LLC | 375 HUKU LII ST, SUITE 205 | KIHEI HI 96753 | |
| 222024035 | 67 SIGNATURE DEVELOPMENT OF HAWAII LLC | SIGNATURE DEVELOPMENT OF HI, LLC | 375 HUKU LII ST, SUITE 205 | KIHEI HI 96753 | |
| 222024035 | 68 SIGNATURE DEVELOPMENT OF HAWAII LLC | SIGNATURE DEVELOPMENT OF HI, LLC | 375 HUKU LII ST, SUITE 205 | KIHEI HI 96753 | |
| 222024035 | 69 SIGNATURE DEVELOPMENT OF HAWAII LLC | SIGNATURE DEVELOPMENT OF HI, LLC | 375 HUKU LII ST, SUITE 205 | KIHEI HI 96753 | |
| 222024035 | 70 SIGNATURE DEVELOPMENT OF HAWAII LLC | SIGNATURE DEVELOPMENT OF HI, LLC | 375 HUKU LII ST, SUITE 205 | KIHEI HI 96753 | |
| 222024035 | 71 SIGNATURE DEVELOPMENT OF HAWAII LLC | SIGNATURE DEVELOPMENT OF HI, LLC | 375 HUKU LII ST, SUITE 205 | KIHEI HI 96753 | |
| 222024035 | 72 SIGNATURE DEVELOPMENT OF HAWAII LLC | SIGNATURE DEVELOPMENT OF HI, LLC | 375 HUKU LII ST, SUITE 205 | KIHEI HI 96753 | |
| 222024035 | 73 SIGNATURE DEVELOPMENT OF HAWAII LLC | SIGNATURE DEVELOPMENT OF HI, LLC | 375 HUKU LII ST, SUITE 205 | KIHEI HI 96753 | |
| 222024035 | 74 SIGNATURE DEVELOPMENT OF HAWAII LLC | SIGNATURE DEVELOPMENT OF HI, LLC | 375 HUKU LII ST, SUITE 205 | KIHEI HI 96753 | |
| 222024035 | 75 SIGNATURE DEVELOPMENT OF HAWAII LLC | SIGNATURE DEVELOPMENT OF HI, LLC | 375 HUKU LII ST, SUITE 205 | KIHEI HI 96753 | |
| 222024035 | 76 SIGNATURE DEVELOPMENT OF HAWAII LLC | SIGNATURE DEVELOPMENT OF HI, LLC | 375 HUKU LII ST, SUITE 205 | KIHEI HI 96753 | |

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| 222024035 | 77 SIGNATURE DEVELOPMENT OF HAWAII LLC | SIGNATURE DEVELOPMENT OF HI, LLC | 375 HUKU LII ST, SUITE 205 | KIHEI HI 96753 | |
| 222024035 | 78 SIGNATURE DEVELOPMENT OF HAWAII LLC | SIGNATURE DEVELOPMENT OF HI, LLC | 375 HUKU LII ST, SUITE 205 | KIHEI HI 96753 | |
| 222024035 | 79 SIGNATURE DEVELOPMENT OF HAWAII LLC | SIGNATURE DEVELOPMENT OF HI, LLC | 375 HUKU LII ST, SUITE 205 | KIHEI HI 96753 | |
| 222024035 | 80 SIGNATURE DEVELOPMENT OF HAWAII LLC | SIGNATURE DEVELOPMENT OF HI, LLC | 375 HUKU LII ST, SUITE 205 | KIHEI HI 96753 | |
| 222024035 | 81 SIGNATURE DEVELOPMENT OF HAWAII LLC | SIGNATURE DEVELOPMENT OF HI, LLC | 375 HUKU LII ST, SUITE 205 | KIHEI HI 96753 | |
| 222024035 | 82 SIGNATURE DEVELOPMENT OF HAWAII LLC | SIGNATURE DEVELOPMENT OF HI, LLC | 375 HUKU LII ST, SUITE 205 | KIHEI HI 96753 | |
| 222024035 | 83 SIGNATURE DEVELOPMENT OF HAWAII LLC | SIGNATURE DEVELOPMENT OF HI, LLC | 375 HUKU LII ST, SUITE 205 | KIHEI HI 96753 | |
| 222024035 | 84 SIGNATURE DEVELOPMENT OF HAWAII LLC | SIGNATURE DEVELOPMENT OF HI, LLC | 375 HUKU LII ST, SUITE 205 | KIHEI HI 96753 | |
| 222024035 | 85 SIGNATURE DEVELOPMENT OF HAWAII LLC | SIGNATURE DEVELOPMENT OF HI, LLC | 375 HUKU LII ST, SUITE 205 | KIHEI HI 96753 | |
| 222024035 | 86 SIGNATURE DEVELOPMENT OF HAWAII LLC | SIGNATURE DEVELOPMENT OF HI, LLC | 375 HUKU LII ST, SUITE 205 | KIHEI HI 96753 | |
| 222024035 | 87 SIGNATURE DEVELOPMENT OF HAWAII LLC | SIGNATURE DEVELOPMENT OF HI, LLC | 375 HUKU LII ST, SUITE 205 | KIHEI HI 96753 | |
| 222024035 | 88 SIGNATURE DEVELOPMENT OF HAWAII LLC | SIGNATURE DEVELOPMENT OF HI, LLC | 375 HUKU LII ST, SUITE 205 | KIHEI HI 96753 | |
| 222024035 | 89 SIGNATURE DEVELOPMENT OF HAWAII LLC | SIGNATURE DEVELOPMENT OF HI, LLC | 375 HUKU LII ST, SUITE 205 | KIHEI HI 96753 | |
| 222024035 | 90 SIGNATURE DEVELOPMENT OF HAWAII LLC | SIGNATURE DEVELOPMENT OF HI, LLC | 375 HUKU LII ST, SUITE 205 | KIHEI HI 96753 | |
| 222024035 | 91 SIGNATURE DEVELOPMENT OF HAWAII LLC | SIGNATURE DEVELOPMENT OF HI, LLC | 375 HUKU LII ST, SUITE 205 | KIHEI HI 96753 | |
| 222024035 | 92 SIGNATURE DEVELOPMENT OF HAWAII LLC | SIGNATURE DEVELOPMENT OF HI, LLC | 375 HUKU LII ST, SUITE 205 | KIHEI HI 96753 | |
| 222024035 | 93 SIGNATURE DEVELOPMENT OF HAWAII LLC | SIGNATURE DEVELOPMENT OF HI, LLC | 375 HUKU LII ST, SUITE 205 | KIHEI HI 96753 | |
| 222024035 | 94 SIGNATURE DEVELOPMENT OF HAWAII LLC | SIGNATURE DEVELOPMENT OF HI, LLC | 375 HUKU LII ST, SUITE 205 | KIHEI HI 96753 | |
| 222024035 | 95 SIGNATURE DEVELOPMENT OF HAWAII LLC | SIGNATURE DEVELOPMENT OF HI, LLC | 375 HUKU LII ST, SUITE 205 | KIHEI HI 96753 | |
| 222024035 | 96 SIGNATURE DEVELOPMENT OF HAWAII LLC | SIGNATURE DEVELOPMENT OF HI, LLC | 375 HUKU LII ST, SUITE 205 | KIHEI HI 96753 | |
| 222024035 | 97 SIGNATURE DEVELOPMENT OF HAWAII LLC | SIGNATURE DEVELOPMENT OF HI, LLC | 375 HUKU LII ST, SUITE 205 | KIHEI HI 96753 | |
| 222024035 | 98 SIGNATURE DEVELOPMENT OF HAWAII LLC | SIGNATURE DEVELOPMENT OF HI, LLC | 375 HUKU LII ST, SUITE 205 | KIHEI HI 96753 | |
| 222024035 | 99 SIGNATURE DEVELOPMENT OF HAWAII LLC | SIGNATURE DEVELOPMENT OF HI, LLC | 375 HUKU LII ST, SUITE 205 | KIHEI HI 96753 | |
| 222024035 | 100 SIGNATURE DEVELOPMENT OF HAWAII LLC | SIGNATURE DEVELOPMENT OF HI, LLC | 375 HUKU LII ST, SUITE 205 | KIHEI HI 96753 | |
| 222024035 | 101 SIGNATURE DEVELOPMENT OF HAWAII LLC | SIGNATURE DEVELOPMENT OF HI, LLC | 375 HUKU LII ST, SUITE 205 | KIHEI HI 96753 | |
| 222024035 | 102 SIGNATURE DEVELOPMENT OF HAWAII LLC | SIGNATURE DEVELOPMENT OF HI, LLC | 375 HUKU LII ST, SUITE 205 | KIHEI HI 96753 | |
| 222024035 | 103 SIGNATURE DEVELOPMENT OF HAWAII LLC | SIGNATURE DEVELOPMENT OF HI, LLC | 375 HUKU LII ST, SUITE 205 | KIHEI HI 96753 | |
| 222024035 | 104 SIGNATURE DEVELOPMENT OF HAWAII LLC | SIGNATURE DEVELOPMENT OF HI, LLC | 375 HUKU LII ST, SUITE 205 | KIHEI HI 96753 | |
| 222024035 | 105 SIGNATURE DEVELOPMENT OF HAWAII LLC | SIGNATURE DEVELOPMENT OF HI, LLC | 375 HUKU LII ST, SUITE 205 | KIHEI HI 96753 | |
| 222024035 | 106 SIGNATURE DEVELOPMENT OF HAWAII LLC | SIGNATURE DEVELOPMENT OF HI, LLC | 375 HUKU LII ST, SUITE 205 | KIHEI HI 96753 | |
| 222024035 | 107 SIGNATURE DEVELOPMENT OF HAWAII LLC | SIGNATURE DEVELOPMENT OF HI, LLC | 375 HUKU LII ST, SUITE 205 | KIHEI HI 96753 | |
| 222024035 | 108 SIGNATURE DEVELOPMENT OF HAWAII LLC | SIGNATURE DEVELOPMENT OF HI, LLC | 375 HUKU LII ST, SUITE 205 | KIHEI HI 96753 | |
| 222024035 | 109 SIGNATURE DEVELOPMENT OF HAWAII LLC | SIGNATURE DEVELOPMENT OF HI, LLC | 375 HUKU LII ST, SUITE 205 | KIHEI HI 96753 | |
| 222024035 | 110 SIGNATURE DEVELOPMENT OF HAWAII LLC | SIGNATURE DEVELOPMENT OF HI, LLC | 375 HUKU LII ST, SUITE 205 | KIHEI HI 96753 | |
| 222024035 | 111 SIGNATURE DEVELOPMENT OF HAWAII LLC | SIGNATURE DEVELOPMENT OF HI, LLC | 375 HUKU LII ST, SUITE 205 | KIHEI HI 96753 | |
| 222024035 | 112 SIGNATURE DEVELOPMENT OF HAWAII LLC | SIGNATURE DEVELOPMENT OF HI, LLC | 375 HUKU LII ST, SUITE 205 | KIHEI HI 96753 | |
| 222024035 | 113 SIGNATURE DEVELOPMENT OF HAWAII LLC | SIGNATURE DEVELOPMENT OF HI, LLC | 375 HUKU LII ST, SUITE 205 | KIHEI HI 96753 | |
| 222024035 | 114 SIGNATURE DEVELOPMENT OF HAWAII LLC | SIGNATURE DEVELOPMENT OF HI, LLC | 375 HUKU LII ST, SUITE 205 | KIHEI HI 96753 | |
| 222024035 | 115 SIGNATURE DEVELOPMENT OF HAWAII LLC | SIGNATURE DEVELOPMENT OF HI, LLC | 375 HUKU LII ST, SUITE 205 | KIHEI HI 96753 | |
| 222024035 | 116 SIGNATURE DEVELOPMENT OF HAWAII LLC | SIGNATURE DEVELOPMENT OF HI, LLC | 375 HUKU LII ST, SUITE 205 | KIHEI HI 96753 | |
| 222024035 | 117 SIGNATURE DEVELOPMENT OF HAWAII LLC | SIGNATURE DEVELOPMENT OF HI, LLC | 375 HUKU LII ST, SUITE 205 | KIHEI HI 96753 | |
| 222024035 | 118 SIGNATURE DEVELOPMENT OF HAWAII LLC | SIGNATURE DEVELOPMENT OF HI, LLC | 375 HUKU LII ST, SUITE 205 | KIHEI HI 96753 | |
| 222024035 | 119 SIGNATURE DEVELOPMENT OF HAWAII LLC | SIGNATURE DEVELOPMENT OF HI, LLC | 375 HUKU LII ST, SUITE 205 | KIHEI HI 96753 | |
| 222024035 | 120 SIGNATURE DEVELOPMENT OF HAWAII LLC | SIGNATURE DEVELOPMENT OF HI, LLC | 375 HUKU LII ST, SUITE 205 | KIHEI HI 96753 | |
| 222024035 | 121 SIGNATURE DEVELOPMENT OF HAWAII LLC | SIGNATURE DEVELOPMENT OF HI, LLC | 375 HUKU LII ST, SUITE 205 | KIHEI HI 96753 | |
| 222024035 | 122 SIGNATURE DEVELOPMENT OF HAWAII LLC | SIGNATURE DEVELOPMENT OF HI, LLC | 375 HUKU LII ST, SUITE 205 | KIHEI HI 96753 | |
| 222024035 | 123 SIGNATURE DEVELOPMENT OF HAWAII LLC | SIGNATURE DEVELOPMENT OF HI, LLC | 375 HUKU LII ST, SUITE 205 | KIHEI HI 96753 | |
| 222024035 | 124 SIGNATURE DEVELOPMENT OF HAWAII LLC | SIGNATURE DEVELOPMENT OF HI, LLC | 375 HUKU LII ST, SUITE 205 | KIHEI HI 96753 | |
| 222024035 | 125 SIGNATURE DEVELOPMENT OF HAWAII LLC | SIGNATURE DEVELOPMENT OF HI, LLC | 375 HUKU LII ST, SUITE 205 | KIHEI HI 96753 | |
| 222024035 | 126 SIGNATURE DEVELOPMENT OF HAWAII LLC | SIGNATURE DEVELOPMENT OF HI, LLC | 375 HUKU LII ST, SUITE 205 | KIHEI HI 96753 | |
| 222024035 | 127 SIGNATURE DEVELOPMENT OF HAWAII LLC | SIGNATURE DEVELOPMENT OF HI, LLC | 375 HUKU LII ST, SUITE 205 | KIHEI HI 96753 | |
| 222024035 | 128 ANDERSON,DAVID C & BODIL M TRUST | | 154 COOKE RD | KULA HI 96790 | |
| 222024035 | 129 GORE-HICKMAN PROPERTIES | | 105 RED RIVER RD | SASKATOON S7K 1G4 | CANADA |
| 222024035 | 130 LIKES, JAMES T | | 1712 HIHIMANU ST | KIHEI HI 96753 | |
| 222024035 | 131 O'BRIEN,LAWRENCE VINCENT | | 1682 HIHIMANU ST | KIHEI HI 96753 | |
| 222024035 | 132 HUSTON,LENARD LYLE | | SITE 270 COMP 26 RR#2 | CARVEL, ALBERTA T0E 0H0 | CANADA |
| 222024035 | 133 SABIN,BILLY JACK & NANCY LEE TRUST | SABIN,BILLY JACK & NANCY LEE TRS | 145 ALAMO HILLS CT | ALAMO CA 94507 | |
| 222024035 | 134 OWENS,JOHNNIE MACK | | 1522 HIHIMANU ST | KIHEI HI 96753 | |
| 222024035 | 135 POLITO FAMILY TRUST | POLITO,STEPHEN J/BARBARA TRS | 30341 VIA FESTIVO | SAN JUAN CAPISTRANO CA 92675 | |
| 222024035 | 136 BELL,THOMAS L | | 809 EASTMAN RD | LONGVIEW TX 75602 | |
| 222024035 | 137 SAKAMOTO,CLYDE & GERRIANNE LIVING TRUST | SAKAMOTO,CLYDE M/GERRIANNE G TRS | 113 MANO DR | KULA HI 96790 | |
| 222024035 | 138 SANDERS,ROBERT DAVID | | 85-52505 RANGE RD, #214 | ARDROSSAN ALBERTA T6E 2H3 | CANADA |
| 222024035 | 139 CANADIAN GRAVITY RECOVERY INC | | 2303 W 41ST AVE | VANCOUVER, BC V6M 2A3 | CANADA |
| 222024035 | 140 SIGNATURE DEVELOPMENT OF HAWAII LLC | SIGNATURE DEVELOPMENT OF HI, LLC | 375 HUKU LII ST, SUITE 205 | KIHEI HI 96753 | |
| 222024035 | 141 HARNETT,ROCK WILLIAM PHILIP | | 30 WEST RIDGE CR, SW | CALGARY, AB T3H 5E1 | CANADA |
| 222024035 | 142 BECKER,MICHAEL JOHN | | 10131 GRISTMILL RIDGE | EDEN PRAIRIE MN 55347 | |

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|-----------|---|----------------------------------|----------------------------|-------------------------|--------|
| 222024035 | 143 JOHNSON,GARRY HENRY | | PO BOX 2010 | BLACKFALDS, AB T0M 0J0 | CANADA |
| 222024035 | 144 RYAN,PATRICK JAMES REVOC LIVING TRUST | C/O PATRICK RYAN | 357 UMEKE ST | KIHEI HI 96753 | |
| 222024035 | 145 SIGNATURE DEVELOPMENT OF HAWAII LLC | SIGNATURE DEVELOPMENT OF HI, LLC | 375 HUKU LII ST, SUITE 205 | KIHEI HI 96753 | |
| 222024035 | 146 SIGNATURE DEVELOPMENT OF HAWAII LLC | SIGNATURE DEVELOPMENT OF HI, LLC | 375 HUKU LII ST, SUITE 205 | KIHEI HI 96753 | |
| 222024035 | 147 SIGNATURE DEVELOPMENT OF HAWAII LLC | SIGNATURE DEVELOPMENT OF HI, LLC | 375 HUKU LII ST, SUITE 205 | KIHEI HI 96753 | |
| 222024035 | 148 SIGNATURE DEVELOPMENT OF HAWAII LLC | SIGNATURE DEVELOPMENT OF HI, LLC | 375 HUKU LII ST, SUITE 205 | KIHEI HI 96753 | |
| 222024035 | 149 SIGNATURE DEVELOPMENT OF HAWAII LLC | SIGNATURE DEVELOPMENT OF HI, LLC | 375 HUKU LII ST, SUITE 205 | KIHEI HI 96753 | |
| 222024035 | 150 SIGNATURE DEVELOPMENT OF HAWAII LLC | SIGNATURE DEVELOPMENT OF HI, LLC | 375 HUKU LII ST, SUITE 205 | KIHEI HI 96753 | |
| 222024035 | 151 SIGNATURE DEVELOPMENT OF HAWAII LLC | SIGNATURE DEVELOPMENT OF HI, LLC | 375 HUKU LII ST, SUITE 205 | KIHEI HI 96753 | |
| 222024035 | 152 SIGNATURE DEVELOPMENT OF HAWAII LLC | SIGNATURE DEVELOPMENT OF HI, LLC | 375 HUKU LII ST, SUITE 205 | KIHEI HI 96753 | |
| 222025001 | 0 PIERCE, VIRGIL/BONNIE | | 817 MAHEALANI PL | KIHEI HI 96753 | |
| 222025002 | 0 YI,WOOK JIN | | 803 MAHEALANI PL | KIHEI HI 96753 | |
| 222025003 | 0 YETTER,BRIAN NEIL | | 809 MAHEALANI PL | KIHEI HI 96753 | |
| 222025004 | 0 ANDREWS,MICHAEL VERNON | | 3180 AKALA DR | KIHEI HI 96753 | |
| 222025005 | 0 SUDA,SCOTT MIKIO | | P O BOX 99 | KIHEI HI 96753 | |
| 222025006 | 0 IWASAKI,NEIL I TRUST | | 785 MAHEALANI PL | KIHEI HI 96753 | |
| 222025007 | 0 MORALES,MARK F | | 789 MAHEALANI PL | KIHEI HI 96753 | |
| 222025013 | 0 SARMIENTO,DERRICK ARNOLD | | PO BOX 1223 | KIHEI HI 96753 | |
| 222025014 | 0 RAMONES,ROSARIO R JR | | 788 MAHEALANI PL | KIHEI HI 96753 | |
| 222025015 | 0 JUAN,RODNEY A | | 68 KUMULA'AU LP | WAILUKU HI 96793 | |
| 222025016 | 0 KASSEBEER,WHITNEY L | | 794 MAHEALANI PL | KIHEI HI 96753 | |
| 222025017 | 0 EOFF,TERRY J. | | 798 MAHEALANI PL | KIHEI HI 96753 | |
| 222025018 | 0 GAMIAO,IMELDA B | | 8472 CAMBRIA CELLARS CT | LAS VEGAS NV 89139 7165 | |
| 222025019 | 0 MATTSON,ALFRED W | | 802 MAHEALANI PL | KIHEI HI 96753 | |
| 222025020 | 0 RAMONES,PRUDEL RAMELB | | 24 HAKOI HEMA PL | KIHEI HI 96753 7350 | |
| 222025021 | 0 FIRST AVENUE 755, LLC | | 1461 E GARNET AVE | MESA AZ 85204 | |
| 222025022 | 0 SAMIO,TRACY JAMES | | P O BOX 92 | KIHEI HI 96753 | |
| 222025023 | 0 TEXEIRA,CAROL SASHA | | 818 MAHEALANI PL | KIHEI HI 96753 | |
| 222025024 | 0 ERNESTBERG,DONALD KAMUELA JR | | PO BOX 330225 | KAHULUI HI 96733 | |
| 222025025 | 0 CARVALHO,HERMAN M | | 829 MAHEALANI ST | KIHEI HI 96753 | |
| 222025026 | 0 INAMASU,NEAL M | | 833 MAHEALANI ST | KIHEI HI 96753 | |
| 222025027 | 0 FERRELL,CURTIS ARNO | | 837 MAHEALANI | KIHEI HI 96753 | |
| 222025028 | 0 ALONZO, NESTOR/ANNIE | | 841 MAHEALANI ST | KIHEI HI 96753 | |
| 222025029 | 0 TABORA,EDUARDO E. | | 845 MAHEALANI ST | KIHEI HI 96753 | |
| 222025030 | 0 CHAVEZ,RENE DELGADO | | 853 MAHEALANI ST | KIHEI HI 96753 | |
| 222025031 | 0 VIERRA,JOHN L, III | | 857 MAHEALANI ST | KIHEI HI 96753 | |
| 222025032 | 0 DOUGLAS,RANDALL EVERETT | | 2350 BAGBY ST APT 6102 | HOUSTON TX 77006 1641 | |
| 222025033 | 0 ABELLON,PATROCINIO A | | 865 MAHEALANI ST | KIHEI HI 96753 | |
| 222025034 | 0 USRY,JOHNNY R., JR. | C/O USRY,JOHNNY/DEBORAH | 869 MAHEALANI ST | KIHEI HI 96753 | |
| 222025035 | 0 HAYNES,CHRISTOPHER D | | 915 KAHOKU PL | KIHEI HI 96753 | |
| 222025036 | 0 SOMERA,BEN JOHN J | | 917 KAHOKU PL | KIHEI HI 96753 | |
| 222025037 | 0 SMITH,BRETT RUSSELL | | 919 KAHOKU PL | KIHEI HI 96753 | |
| 222025038 | 0 HUNTER,MICHAEL ANDREW | | 921 KAHOKU PL | KIHEI HI 96753 | |
| 222025039 | 0 FONTANILLA,MARIO P TRUST | FONTANILLA,MARIO P TRUSTEE | 922 KAHOKU PL | KIHEI HI 96753 | |
| 222025040 | 0 TINOCO,EDUARDO | | 15303 W BECKER LN | SURPRISE AZ 85379 | |
| 222025041 | 0 BRODY,SUZANNE DUBOIS TRUST | | 8696 STREAMCREST DR | BOULDER CO 80302 | |
| 222025042 | 0 MERCIER,NORMAN SCOTT | | 916 KAHOKU PL | KIHEI HI 96753 | |
| 222025043 | 0 REECE,JAMES WILLIAM | | 914 KAHOKU PL | KIHEI HI 96753 | |
| 222025044 | 0 YEE, GAYLAND/BARBARA | | 887 MAHEALANI ST | KIHEI HI 96753 | |
| 222025045 | 0 IWAMI,BRIAN T REV C TR | | 893 MAHEALANI ST | KIHEI HI 96753 | |
| 222025052 | 0 SANDERSON,JOHN W | | 886 MAHEALANI ST | KIHEI HI 96753 | |
| 222025053 | 0 NAKAMOTO,LESTER | | 880 MAHEALANI ST | KIHEI HI 96753 | |
| 222025054 | 0 MILLER,DEL WILLIAM | MILLER,DEL/PAAULENE | 872 MAHEALANI ST | KIHEI HI 96753 | |
| 222025055 | 0 FLIEAR,KELLY ET AL | | 864 MAHEALANI ST | KIHEI HI 96753 | |
| 222025056 | 0 STINE,LARRY W & SUSANNE G TRUST | | 1838 SHERMAN HILL RD N W | POULSBORO WA 98370 8202 | |
| 222025057 | 0 CLERF,SAYOKO MIYAZATO | | 856 MAHEALANI ST | KIHEI HI 96753 | |
| 222025058 | 0 MOSKWA,JAMES | | 852 MAHEALANI ST | KIHEI HI 96753 | |
| 222025059 | 0 GARDNER,JAMES VERNON | | 844 MAHEALANI ST | KIHEI HI 96753 | |
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Final Environmental Impact Statement

Prepared in Support of a
Consolidated Application for
Community Plan Amendment
and Change in Zoning

**PROJECT ASSESSMENT
APPLICATION VOLUME II
(Overview – Appendix C6)**

Applicant:

Maui R&T Partners, LLC
1300 North Holopono, Suite 201
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Prepared by:

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Accepting Authority:

Land Use Commission
Department of Business,
Economic Development &
Tourism
State of Hawaii

March 2013

MAUI RESEARCH & TECHNOLOGY PARK MASTER PLAN UPDATE



~~DRAFT~~ FINAL ENVIRONMENTAL IMPACT
STATEMENT

FOR
MAUI RESEARCH & TECHNOLOGY PARK
MASTER PLAN UPDATE

PREPARED IN SUPPORT OF A CONSOLIDATED APPLICATION FOR
COMMUNITY PLAN AMENDMENT AND CHANGE IN ZONING
APPLICATION

PROJECT ASSESSMENT APPLICATION VOLUME II
(OVERVIEW – APPENDIX ~~E~~ C-6)

Applicant:

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Accepting Authority:

Land Use Commission
Department of Business, Economic Development & Tourism
State of Hawaii

~~June 2012-~~March 2013

OVERVIEW

| | |
|---|---|
| Project Name: | Maui Research & Technology Park Master Plan Update |
| Type of Document: | Environmental Assessment / Draft <u>Final</u> Environmental Impact Statement |
| Applicable Chapter 343 Review “Trigger”: | Amendment to Kihei-Makena Community Plan |
| Approving Agency: | Land Use Commission Department of Business, Economic Development & Tourism State of Hawaii 235 South Beretania Street, Suite 406 Honolulu, HI 96813 <u>Contact: Mr. Daniel E. Orodenker, Executive Director</u> Contact: Mr. Orlando Davidson, Executive Officer (808.587.3822) |
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- Property:** Kihei, Maui
TMK's (2) 2-2-024:1-9, 14-18, 31, 32, 34, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46 and (2) 2-2-002:54 (por.)
- Land Use Controls:** State Land Use: Urban, Agricultural
Community Plan: Project District 6, Public/Quasi-Public, Agricultural
County Zoning: Kihei Research & Technology Park, Agricultural
- Project Summary:** The applicant is seeking to update the Master Plan for the Maui Research & Technology Park. The vision is to transform the current single-use large lot research and technology campus into an integrated and vibrant mixed-use community focused around a regional high-technology employment base. Implementation will require amendments to the Kihei-Makena Community Plan, State Land Use District Boundary, and County Zoning.
- Anticipated Impacts:** There are no significant long-term environmental impacts anticipated to be associated with the proposed project. Short-term impacts include noise and air impacts from construction vehicles associated with roadway improvements and subsequent grading and construction activities.



TABLE OF CONTENTS

| | |
|---|-----------|
| OVERVIEW..... | 1 |
| I. INTRODUCTION AND SUMMARY | 1 |
| A. Maui Research & Technology Park Master Plan Update | 1 |
| B. Summary of Potential Impacts and Proposed Mitigation Measures | 7 |
| 1. Topography and Soils..... | 7 |
| 2. Hazardous Substances..... | 7 |
| 3. Flora and Fauna..... | 8 |
| 4. Air Quality | 10 |
| 5. Noise Quality | 11 |
| 6. Historic and Archaeological Resources | 11 |
| 7. Cultural Resources | 12 |
| 8. Visual Resources | 12 |
| 9. Housing..... | 13 |
| 10. Economy | 13 |
| 11. Public Services | 14 |
| 12. Solid Waste..... | 14 |
| 13. Roadways..... | 15 |
| 14. Drainage | 19 |
| 15. Water..... | 19 |
| 16. Wastewater..... | 20 |
| 17. Electrical | 20 |
| C. Relationship to Governmental Plans, Policies and Controls | 20 |
| 1. State Land Use Law, Chapter 205, Hawaii Revised Statutes..... | 20 |
| 2. Hawaii State Plan, Chapter 226, Hawaii Revised Statutes..... | 21 |
| 3. Hawaii State Functional Plans..... | 21 |
| 4. Maui County General Plan..... | 21 |
| 5. Kihei-Makena Community Plan..... | 22 |
| 6. County Zoning | 22 |
| 7. Coastal Zone Management Act, Chapter 205A, Hawaii Revised Statutes | 23 |
| D. Required Permits and Approvals | 23 |
| E. Alternatives..... | 26 |
| F. Summary of Irreversible and Irretrievable Commitment of Resources | 28 |



| | | |
|------------|--|-----------|
| G. | Summary of Cumulative and Secondary Impacts..... | 28 |
| H. | Summary of Unresolved Issues | 29 |
| II. | MRTP MASTER PLAN UPDATE DESCRIPTION..... | 31 |
| A. | Property Location | 31 |
| B. | Land Ownership and Project Applicant | 31 |
| C. | Existing and Historical Land Use | 37 |
| D. | Purpose and Need..... | 40 |
| E. | Projected Market Demand | 43 |
| F. | MRTP Master Plan Overview..... | 45 |
| 1. | Regional Context | 45 |
| 2. | Existing Site Conditions..... | 48 |
| 3. | Master Plan Approach..... | 49 |
| 4. | Design Principles | 57 |
| 5. | Sustainability Plan..... | 60 |
| G. | MRTP Master Plan Update Overview | 61 |
| 1. | Employment Core | 65 |
| 2. | Mixed-Use Village Center..... | 65 |
| 3. | Single and Multi-Family Residential | 66 |
| 4. | Knowledge Based Employment..... | 66 |
| 5. | Open Space Network & Parks..... | 75 |
| 6. | Civic Uses | 75 |
| 7. | Circulation and Roadways | 79 |
| 8. | Water System..... | 79 |
| 9. | Wastewater System | 79 |
| 10. | Off-site roadway improvements..... | 83 |
| H. | Development Phasing..... | 83 |
| I. | Alternatives..... | 86 |
| 1. | No Action Alternative | 87 |
| 2. | No Residential Uses Alternative | 89 |
| 3. | No Entitlement of Expansion Lands Alternative..... | 90 |
| 4. | Commercial Mixed-Use Alternative | 91 |
| 5. | Less Commercial and Residential Density | 92 |
| J. | Entitlements and Approvals..... | 92 |
| 1. | State Land Use District Boundary Amendment (DBA) | 92 |
| 2. | Community Plan Amendment (CPA) | 93 |
| 3. | Change in Zoning (CIZ)..... | 93 |



| | | |
|-------------|--|------------|
| 4. | Environmental Impact Statement (EIS)..... | 94 |
| III. | AFFECTED ENVIRONMENT, POTENTIAL IMPACTS AND MITIGATION MEASURES.. | 99 |
| A. | Physical Environment..... | 99 |
| 1. | Surrounding Land Uses..... | 99 |
| 2. | Topography and Soils..... | 101 |
| 3. | Natural Hazards..... | 105 |
| 4. | Hazardous Substances..... | 107 |
| 5. | Flora and Fauna..... | 110 |
| 6. | Air Quality..... | 114 |
| 7. | Noise Quality..... | 117 |
| 8. | Historical and Archaeological Resources..... | 120 |
| 9. | Visual Resources..... | 122 |
| 10. | Agricultural Resources..... | 126 |
| 11. | Groundwater Resources..... | 130 |
| B. | Socio-Economic Environment..... | 133 |
| 1. | Population..... | 133 |
| 2. | Housing..... | 134 |
| 3. | Economy..... | 136 |
| 4. | Cultural Resources..... | 139 |
| C. | Public Services..... | 141 |
| 1. | Recreational Facilities..... | 141 |
| 2. | Medical Facilities..... | 143 |
| 3. | Police and Fire Protection Services..... | 143 |
| 4. | Schools..... | 144 |
| 5. | Solid Waste..... | 147 |
| 6. | Civil Defense..... | 149 |
| D. | Infrastructure..... | 150 |
| 1. | Roadways..... | 150 |
| 2. | Drainage..... | 268 |
| 3. | Water..... | 278 |
| 4. | Wastewater..... | 287 |
| 5. | Electrical..... | 290 |
| 6. | Communication and Cable TV Systems..... | 291 |
| IV. | RELATIONSHIP TO GOVERNMENTAL PLANS, POLICIES, AND CONTROLS..... | 292 |
| A. | Chapter 343 Hawaii Revised Statutes..... | 292 |
| B. | State Land Use..... | 292 |
| C. | Hawaii State Plan..... | 311 |



| | | |
|--------------|--|------------|
| D. | Hawaii State Functional Plans | 354 |
| E. | Maui County General Plan | 367 |
| 1. | County-wide Policy Plan..... | 367 |
| 2. | Maui Island Plan | 414 |
| F. | Kihei-Makena Community Plan..... | 429 |
| G. | County Zoning..... | 462 |
| H. | Coastal Zone Management | 465 |
| V. | CONTEXTUAL ISSUES | 473 |
| A. | Relationship between Short-term Uses and Maintenance of Long-term Productivity | 473 |
| B. | Irreversible and Irretrievable Commitments of Resources..... | 475 |
| C. | Cumulative and Secondary Impacts..... | 476 |
| D. | Unresolved Issues | 481 |
| VII. | REFERENCES | 484 |
| VIII. | CONSULTATION AND REVIEW..... | 487 |
| A. | Early Consultation | 487 |
| B. | EIS Preparation Notice Distribution | 488 |
| C. | EIS Early Consultation comment & Response Letters..... | 490 |
| D. | DEIS comment & Response Letters | 492 |

List of Figures

| | |
|---|----|
| Figure 1, Overall Concept Diagram | 5 |
| Figure 2, Detailed Master Plan..... | 6 |
| Figure 3, Regional Location Map..... | 32 |
| Figure 4a, Aerial Photographs | 33 |
| Figure 4b, Aerial Photographs | 34 |
| Figure 5a, Tax Map Key | 35 |
| Figure 5b, Tax Map Key | 36 |



| | |
|---|-----|
| Figure 6, Overall Concept Diagram | 42 |
| Figure 7, Regional Context Map | 47 |
| Figure 8, Existing Site Conditions | 51 |
| Figure 9a, Site Photographs | 52 |
| Figure 9b, Site Photographs..... | 53 |
| Figure 9c, Site Photographs | 54 |
| Figure 9d, Site Photographs | 55 |
| Figure 10, Overall Concept Diagram | 67 |
| Figure 11, Detailed Master Plan..... | 68 |
| Figure 12, Conceptual Birds-Eye Rendering..... | 69 |
| Figure 13, North Ninau Conceptual Rendering | 70 |
| Figure 14, Village Center..... | 71 |
| Figure 15a, Village Center Conceptual Renderings | 72 |
| Figure 15b, Village Center Conceptual Renderings..... | 73 |
| Figure 16, Residential Neighborhood | 74 |
| Figure 17, Knowledge Industry Expansion Campus..... | 76 |
| Figure 18, Village Center Park | 77 |
| Figure 19, Open Space Plan | 78 |
| Figure 20, Circulation Plan | 80 |
| Figure 21, Pedestrian and Bicycle Plan | 81 |
| Figure 22, Transit Circulation Plan..... | 82 |
| Figure 23, Development Phasing Plan..... | 85 |
| Figure 24, State Land Use Map | 95 |
| Figure 25, Maui Island Plan Urban Growth Boundary | 96 |
| Figure 26, Kihei-Makena Community Plan Map | 97 |
| Figure 27, Maui County Zoning Map | 98 |
| Figure 28, Existing Site Topography | 103 |
| Figure 29, Soil Survey Map..... | 104 |
| Figure 30, Flood Insurance Rate Map | 109 |
| Figure 31, Scenic Resources Map..... | 125 |
| Figure 32, ALISH Map | 128 |
| Figure 33, LSB Map..... | 129 |
| Figure 34, Vicinity Map..... | 152 |
| Figure 35, Development Phasing Plan..... | 173 |



| | |
|---|-----|
| Figure 35, Development Phasing Plan..... | 173 |
| Figure 36, Circulation Plan..... | 257 |
| Figure 37a, Typical Street Sections..... | 260 |
| Figure 37b-1, Typical Street Sections..... | 261 |
| Figure 37b-2, Typical Street Sections..... | 262 |
| Figure 37c, Typical Street Sections..... | 263 |
| Figure 37d, Typical Street Sections..... | 264 |
| Figure 38, Transit Circulation Plan..... | 265 |
| Figure 39, Pedestrian and Bicycle Plan..... | 266 |
| Figure 40, Conceptual Pedestrian and Bicycle Connection to Kihei High School..... | 267 |

List of Tables

| | |
|---|----------------|
| Table 1, Required Permits and Approvals..... | 23 |
| Table 1 Required Permits and Approvals..... | 24 |
| Table 1-1 Unresolved Issues..... | 30 |
| Table 2, Conceptual Development Program..... | 61 |
| Table 3, Development Program Phasing..... | 83 |
| Table 4, DOE School Enrollment & Capacity..... | 145 |
| Table 5, Projected Increase in Student Population..... | 146 |
| Table 6, Existing Level of Service..... | 157 |
| Table 7, Projected Year 2024 Level of Service without Project..... | 163 |
| Table 7, Year 2024 No Build Level of Service Scenario 1..... | 165 |
| Table 8, Phase 1 Trip Generation Summary..... | 176 |
| Table 8 Phase 1 Trip Generation Summary..... | 176 |
| Table 9, Phase 1 Project's Share of Total Intersection Traffic Volumes..... | 177 |
| Table 10, Projected Year 2024 Level of Service with Project..... | 179 |
| Table 9 Year 2024 Build Level of Service Scenario 2..... | 181 |
| Table 10 Year 2024 Build With MRTP Roadway Improvements Level of Service Scenario 3..... | 191 |
| Table 11 Year 2024 Build With MRTP and Regional Roadway Improvements Level of Service Scenario 4..... | 198 |
| Table 11, Projected Year 2034 Level of Service without Project..... | 206 |
| Table 12 Year 2034 No Build Level of Service Scenario 1..... | 209 |
| Table 12, Phase 2 Trip Generation Summary—2 Lane Mauka Collector..... | 218 |



| | |
|--|-----|
| Table 13, Phase 2 Trip Generation Summary – 4 Lane Mauka Collector | 218 |
| Table 13 Phase 1 and 2 Trip Generation Summary | 219 |
| Table 14, Phase 2 Project’s Share of Total Intersection Traffic Volumes..... | 220 |
| Table 15, Projected Year 2034 Level of Service with Project | 222 |
| Table 14 Year 2034 Build Level of Service Scenario 2 | 225 |
| Table 15 Year 2034 Build With MRTP Roadway Improvements Level of Service Scenario 3 | 233 |
| Table 16 Year 2034 Build With MRTP and Regional Roadway Improvements Level of Service Scenario 4..... | 240 |
| Table 16 17, Pre-Development Surface Runoff Rate | 269 |
| Table 17 18, Increase in Runoff Attributable to Development of MRTP Project Area... | 270 |
| Table 18 19, Increase in Peak Runoff Rate Attributable to Development of Roadways and Residential Areas..... | 271 |
| Table 19 20, Increase in Peak Runoff Rate Attributable to Development of Commercial Areas | 271 |
| Table 20 21, Result of Peak Runoff Mitigation by MRTP Project Area | 272 |
| Table 21 22, Result of Peak Runoff Mitigation by MRTP Project Area | 273 |
| Table 22 23, Collective Performance of Drainage Detention Systems Serving Commercial Areas..... | 274 |
| Table 23 24, Summary of the Average Potable Drinking water and Irrigation Requirements for the Portion of the MRTP Expansion Not Supplied by DWS..... | 280 |
| Table 24 25, Required Potable Drinking Water Supply Capacities | 280 |
| Table 25 26, Wastewater Flow Projections | 288 |
| Table 26 27, Early Consultation Comment & Response Letters..... | 491 |
| Table 28, DEIS Comment & Response Letters | 492 |

Appendices

- Appendix A Maui County Code, Chapter 19.33
 - Appendix B Environmental Site Assessment
 - Appendix C-1 Botanical and Faunal Survey
 - Appendix C-2 SWCA Botanical and Faunal Survey
 - Appendix C-3 USFWS comment letter on the EISPN
 - Appendix C-4 Applicant response letter dated April 27, 2011
 - Appendix C-5 USFWS comment letter dated June 7, 2011
 - Appendix C-6 Applicant response letter dated October 25, 2011
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| | |
|-------------------------|---|
| Appendix D | Archaeological Inventory Survey |
| Appendix E | Cultural Impact Assessment |
| Appendix F | Preliminary Engineering & Drainage Report |
| Appendix G | Traffic Impact Analysis Report |
| Appendix H | Economic and Fiscal Impact Assessment |
| Appendix I | Water Source Development Assessment of the Potential Impacts on Groundwater Resources |
| Appendix J | Evaluation of Source of Supply Alternatives for the Planned Expansion of the Maui Research and Technology Park |
| Appendix K J | Impacts on Agriculture |
| Appendix L K | Air Quality Study |
| Appendix K-1 | Letter from Air Quality Consultant |
| Appendix M L | Acoustic Study |
| Appendix L-1 | Letter from Acoustic Study Consultant |
| Appendix N M | <u>Historical DBA Incremental Maps</u> |
| Appendix O N | <u>Sustainability Study</u> |
| Appendix P O | <u>Draft Ordinance Chapter 19.33A, MCC</u> |
| Appendix Q P | <u>Incremental Development Plan</u> |
| Appendix R Q | <u>MRTP Development Code</u> |
| Appendix S R | <u>Draft Kihei-Makena Community Plan Maui R&T Park District</u> |
| Appendix T S | <u>Affordable Housing Assessment</u> |



ACRONYMS AND ABBREVIATIONS

| | |
|------------|---|
| AAQS | Ambient Air Quality Standards |
| ac | acre |
| ALISH | Agricultural Lands of Importance to the State of Hawai‘i |
| AMI | Area Median Income |
| BMP | Best Management Practices |
| BWS | Board of Water Supply (County of Maui) |
| CDP | Census Defined Place |
| CIA | Cultural Impact Assessment |
| CWRM | Commission on Water Resource Management |
| CZM | Coastal Zone Management |
| <u>DBA</u> | <u>District Boundary Amendment</u> |
| DBEDT | Department of Business, Economic Development and Tourism (State of Hawai‘i) |
| DEM | Department of Environmental Management (County of Maui) |
| DLNR | Department of Land and Natural Resources (State of Hawai‘i) |
| DOE | Department of Education (State of Hawai‘i) |
| DOH | Department of Health (State of Hawai‘i) |
| DOT | Department of Transportation (State of Hawai‘i) |
| DPW | Department of Public Works (County of Maui) |
| DU | Dwelling Units |
| DWS | Department of Water Supply (County of Maui) |
| DEIS | Draft Environmental Impact Statement |
| FEIS | Final Environmental Impact Statement |
| EISPN | Environment Impact Statement Preparation Notice |
| FEMA | Federal Emergency Management Agency |
| FIRM | Flood Insurance Rate Map |
| GPD | Gallons per day |
| GPM | Gallons per minute |
| HRS | Hawaii Revised Statutes |
| HTCO | Hawaiian Telcom |
| HUD | U.S. Department of Housing and Urban Development |
| KCA | Kihei Community Association |
| KWWTF | Kihei Wastewater Treatment Facility |
| kV | Kilovolt |
| LEED-ND | Leadership in Energy and Environmental Design – New |



| | |
|--------------|--|
| LOS | Development |
| LSB | Level of Service |
| LUC | Land Study Bureau |
| LUC | Land Use Commission (State of Hawai‘i) |
| <u>MCC</u> | <u>Maui County Code</u> |
| <u>MEDB</u> | <u>Maui Economic Development Board</u> |
| MECO | Maui Electric Company |
| MG | Million gallons |
| MGD | Million gallons per day |
| MMA | Maui Market Area |
| MRTTP | Maui Research & Technology Park |
| MVA | Megavolt Amperes |
| NPDES | National Pollutant Discharge Elimination System |
| NFIP | National Flood Insurance Program |
| Oceanic | Oceanic Time Warner Cable |
| OEQC | Office of Environmental Quality Control (State of Hawai‘i) |
| OHA | Office of Hawaiian Affairs |
| PCB | Polychlorinated biphenyls |
| PV | Photovoltaic |
| PVE | Polyvinylchloride |
| ROW | Right-of-Way |
| SCS | Soil Conservation Service |
| SF | Square Feet |
| SHPD | State Historic Preservation Division (Hawai‘i) |
| SMA | Special Management Area |
| State | State of Hawai‘i |
| TMK | Tax Map Key |
| UBC | Uniform Building Code |
| UGB | Urban Growth Boundary |
| UIC | Underground Injection Control |
| USDW | Underground Sources of Drinking Water |
| <u>USFWS</u> | <u>United States Fish and Wildlife Service</u> |
| VOIP | Voice Over Internet Protocol |
| WWRF | Wastewater Reclamation Facility |



I. INTRODUCTION AND SUMMARY

A. MAUI RESEARCH & TECHNOLOGY PARK MASTER PLAN UPDATE

The concept for the Maui Research and Technology Park (hereafter “MRTP” or “the Park”) originated in the 1980’s with local private and public sector leaders intent on diversifying Maui’s economy through investment in high technology. The economy was too heavily dependent on tourism and agriculture, and a Research & Technology Park was seen as a tool to help create the “third leg of the stool”, adding different kinds of jobs and making the overall economy less vulnerable and more robust through diversity. Since that time, the Island’s agricultural sector has been contracting, and the tourist economy has shown its volatility with changes in the broader economy. With the current economic downturn, the goal of economic diversification remains more important now than ever.

MRTP went from concept to full entitlement for development by the late 1980’s, and the first building opened in the early 90’s. While the Park is privately owned, it has received significant support and investment by Federal, State, and County Government in assets such as the Maui High Performance Computing Center and the Maui Research and Technology Center.

The Maui Economic Development Board (MEDB), a seasoned leader of economic diversification efforts, is also headquartered in the Park. MEDB has long been an advocate and leader in the development of the Park, and was one of the original R&T Park Partners leading the efforts to entitle the Park. Thirty years later, while no longer a formal partner, MEDB’s support continues through its economic development and workforce training programs.



Through MEDB's nationally acclaimed workforce development program, 11,000 Maui County high school and middle school students visit MRTP each year to explore career opportunities with Park companies. This program also delivers curriculum, implemented throughout the state, that enhances Science, Technology, Engineering, and Mathematics education, which has been identified as crucial in building the qualified workforce for employers in the Park and elsewhere. Today, 25% of the workforce in the Park was born in Hawaii and this number continues to grow through the hard work of MEDB and others.

Since its inception approximately 180,000 square feet of Class A office, laboratory, and data center space has been developed. An estimated \$100-\$150 million a year in revenue flows through the Park's businesses and projects. The Park and all its current buildings and associated infrastructure represent an estimated \$60 Million investment.

Approximately 400 people work in the Maui Research & Technology Park at over 20 companies. Among others, the Park is home to Akimeka, Boeing, the Maui High Performance Computing Center, the Joint Information Technology Center, and Pacific Defense Solutions. Park companies work in a variety of sectors, including optics, directed energy, data fusion, space surveillance/situational awareness, software development, and professional services.

However, even with these achievements, the breadth and depth of employment opportunities is significantly less than what more modern and progressively planned parks' are capable of delivering. At their best, technology parks act not only as a magnet for already established businesses, but also embrace and accelerate businesses start-ups by nurturing local talent and ideas.

The current Maui Research & Technology Park is simply too inflexible to fully respond to the needs of an increasingly diverse high technology industry. The Park's current 2-acre minimum lot size makes it cost prohibitive for many small businesses to enter the Park. And, at the other end of the spectrum, fully entitled lots of sufficient size are not readily available for large campus type users. If such a user was to desire a lot in the Park, years of costly entitlement processing would be required before the campus could be developed.



Exacerbating the current condition is the Park's zoning ordinance which prohibit mixed-use development. This prohibition has made the Park isolated from the types of goods, services and amenities that a high technology workforce desires. Current employees of the Park are required to drive to and from work and since few daytime amenities exist, the Park is entirely automobile dependent.

In the time since the creation of the Maui Research and Technology Park, understanding of innovation clusters and the needs of knowledge workers and businesses has increased. Technology businesses thrive in areas of diversity and activity. A diversity of businesses and workers and availability of many startup spaces enhance the chance for success of individual businesses as well as the cluster as a whole.

After in-depth research and analysis of the current best practices in planning and developing research & technology parks and employment centers, internationally renowned urban design firm Calthorpe Associates was selected to head the master plan update for the Park. Firm founder Peter Calthorpe and the principles of his firm are leaders in the design of new urban communities – including those with a regional employment base like the Park.

This Master Plan Update proposes to utilize the principles of New Urbanism and Smart Growth to transform the current, single-use large lot research and technology campus into an integrated and vibrant mixed-use community focused around a regional knowledge-based industry employment base.

The Master Plan Update includes fundamental design elements that will have positive effects on the environment, on individual health and well being, and on the long-term economic viability and adaptability of the Park. The Master Plan Update encompasses approximately ~~414~~ 411 acres and includes the following components: employment core; knowledge industry expansion; mixed-use village center; residential areas; and an open space network and parks. The employment Core includes the Park's existing buildings and currently vacant lots. Major new knowledge-based employment zones (knowledge industry expansion) are located *mauka* and to the south of the employment core. Sufficient land area is available within the knowledge industry expansion zones to accommodate up to 2 million square feet of building area on a great diversity of lot sizes. A ~~58-~~ 64.079 acre mixed-use village center will include a mix of housing, office, civic, live-



work, park, and neighborhood serving retail uses within a compact mixed-use setting. A mix of single-family and multi-family residential totaling 1,250 units will be provided with homes priced for a range of consumer groups, including workforce affordable homes in compliance with Chapter 2.96 MCC (Residential Workforce Housing Policy). The Master Plan Update also includes multiple types of open spaces and parks (See: Figure 1, “Overall Concept Diagram” and Figure 2, “Detailed Master Plan”).

The Master Plan will be implemented in two phases through 2034. It is anticipated that all of the necessary land use entitlements to fully implement the Plan will be obtained by early 2014. (See: Table 1) Key infrastructure improvements will be tied to each phase of development and as the improvements are warranted.

Maui Research & Technology Park

OVERALL CONCEPT DIAGRAM

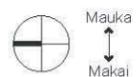


LEGEND

- Project Boundary
- Mixed-Use
- Knowledge Industry
- Knowledge Industry Expansion
- Residential & Expansion
- Open Space / Parks

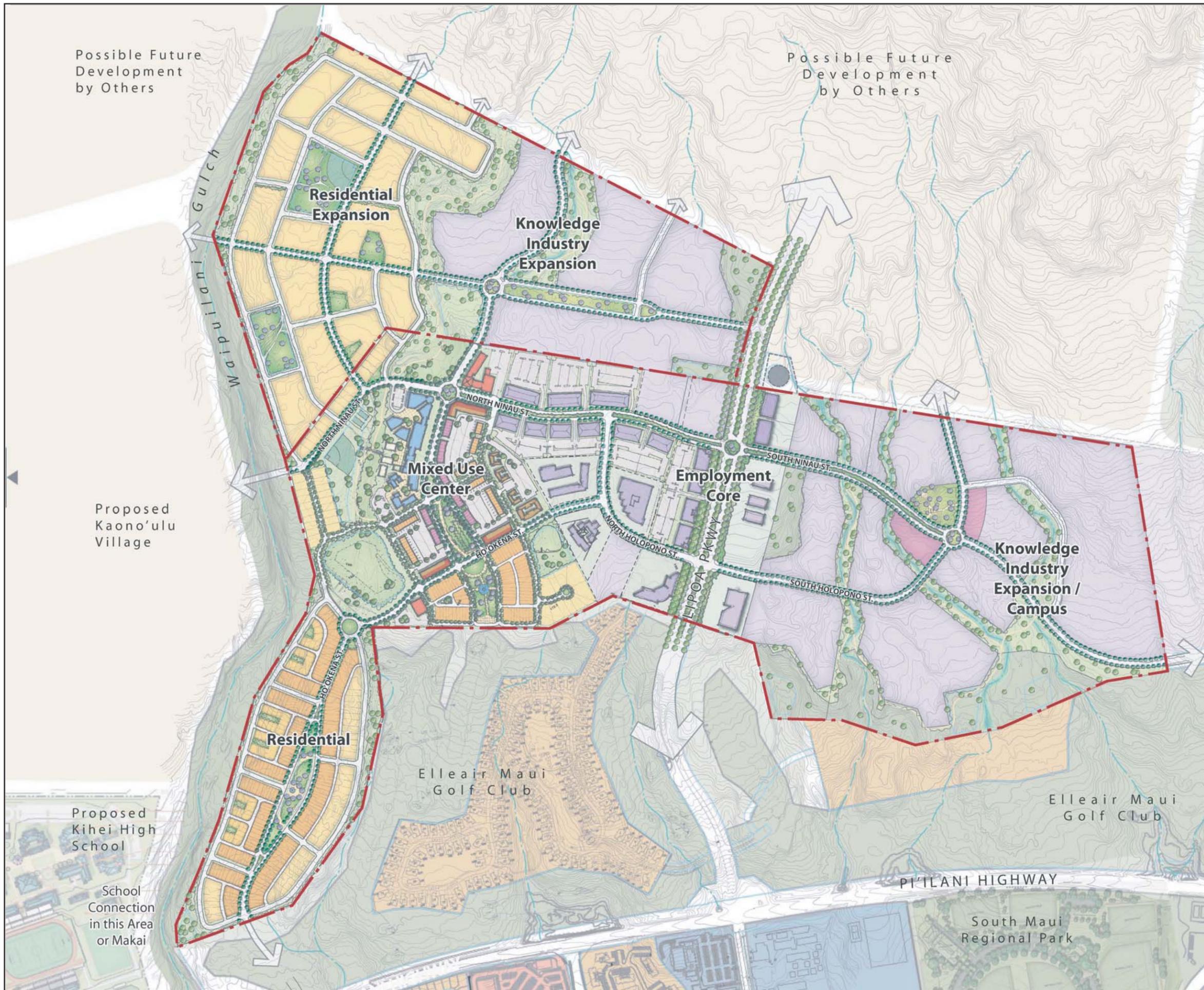
FIGURE NO. 1
OVERALL CONCEPT DIAGRAM
MAUI RESEARCH & TECHNOLOGY PARK
 Kihei, Maui, Hawaii

March 20, 2012



Maui Research & Technology Park

MASTER PLAN



LEGEND

- - - Project Boundary
- Retail
- Knowledge Industry
- Live-Work / Flex Space
- Multi-Family
- Townhomes
- Single Family
- Civic / School
- Park
- Open Space

FIGURE NO. 2
CONCEPTUAL MASTER PLAN
MAUI RESEARCH & TECHNOLOGY PARK
 Kihei, Maui, Hawaii

March 20, 2012





B. SUMMARY OF POTENTIAL IMPACTS AND PROPOSED MITIGATION MEASURES

The implementation of the Park Master Plan Update will involve the development of currently vacant land adjacent to existing Urban development. Appropriate mitigation measures have been incorporated throughout the project to minimize or mitigate potential adverse impacts. The following summarizes potential impacts and mitigation measures recommended or planned.

1. Topography and Soils - Implementation of the Master Plan Update will require grading for roads and buildings upon development, for areas not currently developed. Impacts to the soils include the potential for soil erosion and the generation of dust during construction. Clearing and grubbing activities will temporarily disturb the soil retention values of the existing vegetation and expose soils to erosion forces. Some wind erosion of soils could occur without a proper watering and re-vegetation program. Heavy rainfall could also cause erosion of soils within disturbed areas of land.

To the extent possible, improvements will conform to the contours of the land, further limiting the need for extensive grading of the site. In addition, graded areas will be limited to specific areas for short periods of time. A National Pollutant Discharge Elimination System (NPDES) permit will be required from the State of Hawaii, Department of Health (DOH) prior to grading activities. During site preparation, storm runoff from the MRTP will be controlled in compliance with the County's "Soil Erosion and Sediment Control Standards". All construction activities will comply with all applicable Federal, State and County regulations and rules for erosion control. After construction, the establishment of permanent landscaping will provide long-term erosion control (See: Section III.A.2, Topography and Soils).

2. Hazardous Substances - The following observations were made during the field survey of the Phase I Environmental Site Assessment (ESA) of the MRTP site;

The MRTP predominately consist of undeveloped grazing lands with no permanent building structures.



- Two construction baseyards are located on-site.
- Approximately two (2) gallons of waste oil in an oil pan were observed, and related ground soil staining.
- A limited amount of solid waste dumping was evident including Special Waste that requires proper management.
- One (1) groundwater well is located on-site.
- One small-scale sewer pump station is located on site.
- The bulk storage/use of hazardous/regulated materials was not noted on site.

The ESA found no evidence of recognized environmental conditions at the property. The ESA report recommends that waste oil and related surface oil staining should be properly managed and underlying soils should be tested to confirm all contamination has been effectively removed. The two construction base yards and solid waste items dumped on site (i.e. derelict vehicle, batteries, tires, waste oil,) have been removed.

The remaining potential concerns identified by the ESA are limited in scope and will be mitigated prior to or during project development. No impacts from hazardous substances are anticipated at the MRTP site, based on the conclusions of the Phase I ESA (See: Appendix B, “Environmental Site Assessment” and Section III.A.4, Hazardous Substances).

3. Flora and Fauna – The MRTP site is dominated by two (2) non-native plant species: *kiawe* trees and buffelgrass. A total of 23 species were noted during site surveys, of which two (2) were native to the Hawaiian Islands: *‘ilima* and *‘uhaloa*. The biologist noted that *‘ilima* was rarely observed on the property, and *‘uhaloa* was uncommon there. Three (3) non-native mammalian species and 14 non-native bird species were noted in the surveys. The surveys found no evidence of the Hawaiian hoary bat (*Lasiurus cinereus semotus*) or the Blackburn’s sphinx moth (BSM). No Federal or State listed threatened or endangered plant or animal species were identified on the property.

The Applicant intends to incorporate the following measures into the project to minimize potential impacts to listed species and native habitats:

Avoid Direct Impacts to Hawaiian Hoary Bats. To minimize the potential impacts to the Hawaiian Hoary bat, woody plants greater than fifteen (15) feet tall will not be re-



moved or trimmed between June 1 and September 15 throughout the development and operation of the project.

Minimize Light Impacts to Seabirds. Outdoor lighting will be minimized to the extent practicable to help avoid creating an attractive nuisance to Newell's shearwaters (*Puffinus newelli*) and Hawaiian petrels (*Pterodroma sandwichensis*) that might transit over the property at night.

Minimize Attraction and Impacts to Listed Birds. Expansion of the MRTP will not involve the creation of golf course(s) or permanent open water features. Tenants will be expected to comply with Maui County leash laws. Maui R&T Partners, LLC will institute a pest control program administered by groundskeepers aimed primarily at rodent and feral animal control.

Avoid or Address Impacts to the Blackburn's Sphinx Moth. No known larval host plants for the Blackburn's sphinx moth have been observed within the MRTP property. Another comprehensive survey for endangered Blackburn's sphinx moth host plants will be conducted just prior to land clearing to ensure that the species and its habitat will not be affected by the Project.

Survey for Yellow-Faced Bees and Protected Plant Species. Since the MRTP is dominated by non-native grasses and scrub vegetation and 'ilima is uncommon here, SWCA concluded that it is highly unlikely that the MRTP properties are habitat for Hawaiian yellow-faced bees.

Minimize Wildfire Impacts. During Project construction, measures will be taken to maintain a sufficient fire break along the boundaries of the proposed MRTP expansion. When fully developed, the MRTP will displace non-native grass, weed, and scrub fuels from an area of approximately 401 acres.

To service the area, the completed MRTP will have fire hydrants and water pressures as required by law. The Applicant will also work with the County Fire Prevention Bureau to minimize potential wildfire risks within and adjacent to the MRTP footprint.

Minimize the Spread of Invasive Species. During land clearing and construction associated with expansion of the MRTP, care will be taken to prevent the invasion of dis-



turbed areas by noxious invasive weed species, non-native tree tobacco, and other potential non-native host plants of the Blackburn's sphinx moth. To minimize the potential for introducing new invasive plants to the Project area, Maui R&T Partners, LLC will ensure that off-site sources of revegetation materials (seed mixes, gravel, mulches, etc.) are certified weed-free. The MRTP will encourage the use of native plant species for landscaping, and discourage the use of known invasive plant species (See: Section III.A.5, Flora and Fauna).

4. Air Quality - During development, grading and construction-related activities will result in short-term impacts to air quality. Best Management Practices (BMPs) will help to mitigate such impacts. Adequate dust control measures, in compliance with HAR, Chapter 11-60.1, "Air Pollution Control," Section 11-60.1-33, Fugitive Dust will be required. In compliance with these provisions a dust control plan will be implemented during all phases of construction (See: Section III.A.6, Air Quality, contains the full discussion).

According to the Air Quality Study (Appendix L K and Appendix K-1 "Letter from Air Quality Consultant") computer modeling done as part of the study to measure current ambient concentrations of carbon monoxide levels at intersections in the vicinity of the project indicate that present 1-hour and 8-hour carbon monoxide concentrations are well within both the state and the national ambient air quality standards.

During the operations phase, motor vehicles coming to and from the project site will impact air quality by emitting pollutants into the atmosphere. However, according to the Air Quality Study, carbon monoxide concentrations in year 2034 with the proposed project and mauka collector road are projected to be slightly lower (better) than present conditions, and worst-case conditions should remain well within air quality standards. This is due primarily to the assumed retirement of older motor vehicles with less efficient emission control equipment.

The project will also increase the demand for electricity. Assuming that power continues to be derived mostly from fuel oil, sulfur dioxide emissions would increase by about 275 tons per year and nitrogen oxides emissions could increase by about 93 tons per year. Renewable energy resources, if developed, could reduce these emissions substantially. Incorporating energy conservation design features and promoting energy conser-



vation programs within the proposed development could also serve to reduce any associated emissions.

5. Noise Quality – In the short-term, the Project could generate some adverse impacts during construction. Noise from heavy construction equipment, such as bulldozers and material-carrying trucks and trailers, would be the dominant source of noise during the construction period. To minimize construction related impacts to the surrounding neighbors, the developer will limit construction activities to normal daylight hours and activities associated with the construction phase of the Project will comply with the Department of Health’s Administrative Rules, Chapter 11-46, “Community Noise Control”.

The existing and future vehicular noise levels in the vicinity of the Project were also evaluated for their potential impacts and their relationship to current FHA/HUD noise standards for noise sensitive land uses. The traffic noise level increases along the roadways servicing the project site were calculated. Significant increases in traffic noise levels at noise sensitive properties are not expected to occur as a result of the project traffic following build-out by CY 2024 and 2034. (See: Appendix M-L, “Acoustic Study” and Appendix L-1 “Letter from Acoustic Study Consultant” and Section III.A.7 “Noise Quality” contains the full discussion).

6. Historic and Archaeological Resources – Consistent with the barren zone model for pre-contact settlement in the Kihei area, the Project’s Archaeological Inventory Survey (AIS) yielded a limited number of sites and therefore no further archaeological work is recommended for this project area.

Recommendations set forth by the AIS include the following:

Informally preserve the entirety of Site -6241 wall or portion thereof if given the opportunity.

Provide an orange protective fence to be placed along Site -6241, which is the wall on northern ridgeline boundary of Parcel 17, to protect two undocumented rock shelters occurring off site below in Waipuilani Gulch.

In a letter dated October 27, 2008 the State Historic Preservation Division determined that the AIS was acceptable and recommended that Site -6241 should be bordered by



protective orange construction fencing prior to ground altering disturbance within TMK: (2) 2-2-024:017 (See: Section III.A.8, “Historical and Archaeological Resources”).

In comment letters dated August 27, 2012 and December 6, 2012 the State Historic Preservation Division determined that no historic properties will be affected by the proposed project (See: Section III.A.8, “Historical and Archaeological Resources” and Table 28).

7. Cultural Resources – Cultural activities are not currently taking place on the property and cultural resources of importance to native Hawaiians for cultural practices were not identified in the Cultural Impact Assessment report or the AIS conducted on the property. There were no visible cultural resources, i.e. medicinal plants, shoreline resources, religious sites, or archeological resources observed on the property. From a cultural practices and beliefs perspective, the subject property bears no apparent signs of cultural practices or gatherings currently taking place. Therefore it can be concluded that development of the site will not impact cultural resources on the property or within its’ immediate vicinity. In order to assure the cultural integrity of the project, a qualified cultural specialist should participate in various cultural related activities. Activities would include the development and implementation of the cultural orientation for construction personnel, advice concerning inadvertent finds and related protocol, and any other cultural concerns during the length of the project (See: Section III.B.~~W~~ 4, “Cultural Resources” and Table 28).

8. Visual Resources – Future non-residential development at the MRTP will not exceed ~~45~~ 50 feet in height and comprehensive Design Guidelines will restrict building height, size, layout and architectural design. Because most of the site is located nearly one mile mauka of the Piilani Highway, the Project’s building heights and massing should not significantly impact views of Haleakala from Piilani Highway. The *makai* residential section of the Project is approximately 200 yards *mauka* of the Piilani Highway and building heights in ~~this~~ residential areas are limited by County Code to no more than ~~35~~ 40 feet.

The Master Plan Update will transform the character of the MRTP from its existing large-lot only design to a community involving parks, housing directed at employees of the Park, neighborhood serving retail, commercial space, pedestrian and bicycle networks and open space. The Master Plan Update’s Design Guidelines will maintain views



towards the summit of Haleakala and the Pacific Ocean. Open space is integrated throughout the Project and, together with the proposed street layout, creates and frames view corridors throughout the Park to the Pacific Ocean and to Haleakala.

With regard to design, the Project will complement the high quality architectural character of the existing MRTP as well as other developed properties in the area. All buildings within the Project will be designed in accordance with the Design Guidelines, as well as applicable County standards (See: Section III.A.9, “Visual Resources”).

9. Housing – The Master Plan Update allows for residential uses in conjunction with business uses in the MRTP. It is anticipated that over the course of build-out the Park sufficient employment will be generated to warrant the construction of housing. By locating housing within the Park, housing is brought closer to jobs, thus reducing commuting time and mitigating traffic congestion.

The Master Plan Update proposes the development of up to 1,250 residential dwelling units targeted at the full spectrum of workers in the Park. Homes will be priced for a range of consumer groups, including workforce affordable homes in compliance with Chapter 2.96 MCC (Residential Workforce Housing Policy). All workforce affordable homes will be priced and subject to restrictions in accordance with the requirements of Chapter 2.96, MCC (See: Section III.B.2, “Housing”).

10. Economy – Fuller development of the MRTP is expected to generate short-term economic benefits in the form of construction-related employment, as well as long-term benefits that include increased permanent employment and tax revenues. It is estimated that the Park will generate circa \$1.39 billion in capital investment into the island’s economy. The construction of the Park and on-going operations and maintenance of the residences, on-site commercial and industrial/businesses, and community facilities, will provide an estimated 63,507 “worker-years” of employment and \$2.7 billion in total wages over a 19-year period. After “stabilization” the urban village community will support some 5,878 permanent jobs on-site with an annual payroll of about \$217 million, and an additional 1,469 workers with \$68.6 million in yearly wages on-site. The net benefits to the State on an annual basis after build-out (tax collections minus service costs) will be \$57.3 million and \$21.5 million to the County. In addition to the direct economic impact, the project will stimulate economic development outside of the Park. The



base economic impact on Maui will total \$7.8 billion during build-out and \$903.9 million annually upon stabilization.

The Master Plan Update responds to the most current trends in the development of innovation centers nationwide. The Master Plan Update will strengthen Maui's economy by making the MRTP a more attractive location for knowledge-based industries. These industries will create high paying jobs for residents, which will in turn have a positive impact on the rest of the Maui economy. The result will be an increase in economic activities and employment opportunities on the neighbor islands consistent with community needs and desires, which will promote increased opportunities for Hawaii (See: Section III.B.3, "Economy").

11. Public Services – The MRTP Master Plan Update will contribute to increased State and County revenues in the form of increased property taxes, general excise taxes, and increased income taxes from increased employment. Should the State and County choose to allocate these additional tax revenues to fund more services to protect public health, welfare, and safety, any cost to the public that may result will be effectively minimized. MRTP will also contribute significantly to the provision of public facilities such as land for parks and schools. The Plan proposes on-site mini- and neighborhood parks, and open space totaling ~~46.5~~ 88.7 acres. This equates to ~~16.87~~ 32.18 acres of park land per 1,000 project population. In addition, the owners of the project will comply with the requirements for Parks and Playgrounds, pursuant to Maui County Code Section 18.16.320.

The applicant will comply with any impact fee ordinances for police and fire. The project site is being designed to accommodate a public and/or private elementary or intermediate school campus within the Village Center. In addition, the applicant will comply with the State Department of Education's impact fee ordinance (See: Section III.C, "Public Services").

12. Solid Waste – Waste generated by site preparation will primarily consist of vegetation, rocks, and debris from clearing, grubbing and grading. Very little demolition material is expected, as the site is essentially vacant. During the short term, construction activities will require the disposal of the existing onsite waste, as well as cleared vegetation and construction-related solid waste. A solid waste management plan will be coordinated with the County's Solid Waste Division for the disposal of onsite and construc-



tion-related waste material. The County of Maui Integrated Solid Waste Management Plan (2009) provides strategies for diverting solid waste from landfills to reduce landfill dependency, save landfill capacity and improve operational efficiency. The MRTP will be supportive of these strategies by providing options for recycling, such as collection systems and bin space within the Park and promoting sound recycling practices among residents and businesses (See: Section III.C.5, "Solid Waste").

13. Roadways – The gradual build-out of the MRTP will increase traffic to and from the project and within the project itself. In response to comments from HDOT and Ms. Victoria Huffman the revised Traffic Impact Analysis Report (TIAR) in Appendix H G documents the impact of the Master Plan and identifies appropriate mitigation measures. The TIAR recommends that the following improvements be constructed with Phase I of the Project:

- ~~1. Upgrades to the Piilani Highway / Lipoa Parkway signalized intersection to increase capacity, including:
 - ~~a. Construction of a second southbound left turn lane on Piilani Highway;~~
 - ~~b. Widening Lipoa Parkway to create separate left, through, and right turn lanes at the westbound approach to the intersection;~~
 - ~~c. Widening and restriping Lipoa Street to provide separate left, through, and right turn lanes at the eastbound approach to the intersection;~~~~
- ~~2. Traffic signal timing adjustments at the Liloa Drive / Lipoa Street intersection to improve operation;~~
- ~~3. If feasible, construct a second access onto Piilani Highway from MRTP at the permitted access point near East Waipuilani Road; and~~
- ~~4. Design the MRTP roadway network with connectivity to adjacent developments to the north and south to facilitate the creation of a continuous roadway network mauka of Piilani Highway which will reduce dependence on Piilani highway.~~



1. Piilani Highway/Hookena Street Access
 - a) Construct 2-lane Hookena Street from within MRTP to intersect Piilani Highway across from East Waipuilani Road;
 - b) Configure the westbound Hookena approach as a right-in/right-out access with stop control;
 - c) Provide acceleration and deceleration lanes to and from Piilani Highway;
 - d) Maintain existing delineators on Piilani Highway to prevent left turns from East Waipuilani Road or Hookena Street from crossing the center line of Piilani Highway.
2. Piilani Highway/Piikea Avenue
 - a) Construct an additional eastbound Piikea Avenue left turn lane (two total);
 - b) Retime the traffic signal accordingly to optimize the intersection operation.
3. Piilani Highway/Lipoa Parkway
 - a) Construct an additional southbound Piilani left turn lane (two total);
 - b) Widen westbound Lipoa Parkway to provide for left, through, and right turn lanes;
 - c) Widen and/or restripe eastbound Lipoa Street to provide left, through, and right turn lanes;
 - d) Adjust signal timing and phasing to provide leading protected left turn phases for the east and westbound Lipoa left turn movements;
 - e) Add the missing crosswalk on north Piilani leg of the intersection to improve pedestrian connectivity.
4. Internal Kihei High School Access
 - a) Construct an internal Kihei High School Access from within MRTP;
 - b) Provide bicycle and pedestrian connectivity between the school and MRTP

The TIAR recommends that the following improvements be constructed with Phase II of the Project:



- ~~1. Extend Lipoa Parkway to the eastern (mauka) boundary of the Phase 2 Option Lands to facilitate its future extension to the Mauka Collector roadway. A new intersection for the MRTP Phase 2 north-south internal connector roadway will also be constructed on Lipoa Parkway;~~
- ~~2. Extend at least three internal connector streets within the MRTP roadway system to the eastern (mauka) boundary of Phase 2 to facilitate their extension to the future north-south running Mauka Collector arterial roadway and the creation of additional westbound routes into the MRTP;~~
- ~~3. If feasible and deemed to be of significant benefit at the time Phase 2 is undertaken, construct a third access onto Piilani Highway at the permitted access point near the old Welakahao Road intersection (i.e. where the Kihei Wastewater Reclamation Facility's driveway is currently located).~~
1. Piilani Highway/Old Welakahao Road
 - a) Construct 2-lane Old Welakahao Road as MRTP's direct access to Piilani Highway;
 - b) Signalize the intersection and provide a leading protected left turn phase for the southbound Piilani Highway left turn into Old Welakahao Road;
 - c) Provide southbound left turning lane from Piilani Highway to Old Welakahao Road and westbound left turning lane from Old Welakahao Road to Piilani Highway;
 - d) Provide acceleration and deceleration lanes to and from Piilani Highway.
2. Mauka collector within MRTP property
 - a) Construct the mauka collector as a four-lane roadway within MRTP property;
 - b) Construct three mauka-bound access points to the mauka collector with proper intersection spacing within MRTP property;



~~In addition, in response to projected background growth, the TIAR recommends that the following additional mitigation improvements be constructed by year 2024 to address the without project conditions:~~

- ~~1. Complete Liloa Drive continuously between Kaonoulu Street and Kanani Road as a two-lane roadway; and~~
- ~~2. At the intersection of Piilani Highway/East WelaKahao Road, observe queuing at the East WelaKahao Approach left turn to determine the extent to which the northbound Piilani Highway refuge lane is utilized.~~

~~In addition, the TIAR recommends that the following mitigation improvements be constructed by year 2034 to address the Without Phase 2 project conditions:~~

- ~~1. Construct the Mauka Collector as a two-lane roadway between Mokulele Highway and a point on Piilani Highway south of MRTP; and~~
- ~~2. Determine whether the addition of an additional left turn lane for the eastbound Piikea approach and/or northbound Piilani Approach is appropriate to address the capacity issues at the intersection of Piilani Highway/Piikea Avenue; and~~
- ~~3. Examine potential methods to increase capacity of the roundabout at the intersection of Liloa Drive/Piikea Avenue.~~

Since the TIAR relies upon growth projections for many years into the future as a basis for making its recommendations, it is recommended that future regional traffic studies confirm the need for the Report's identified mitigation measures based upon actual operating conditions closer to the time that the improvements might be warranted.

The Master Plan itself seeks to reduce automobile dependence by incorporating "smart growth" principles into the land use plan. The MRTP currently supports a substantial employment base that is projected to grow exponentially into the future. In order to create a "jobs housing balance" and to reduce commuting to and from the employment base, the Master Plan incorporates residential, commercial and civic services into the Plan to create a truly "mixed use" settlement pattern that will increase walking and biking. The Master Plan also proposes Transportation Demand Management countermea-



asures, such as encouraging alternate work schedules and off peak hours for employment generators, to reduce peak hour commuting and to increase bicycling and walking. (Section II.D.1, Roadways, contains the full discussion.)

14. Drainage - The gradual build-out of the MRTP will increase impervious surfaces, which will lead to an increase in drainage. However, the increase in drainage caused by the project will be retained on-site in accordance with the County of Maui's Drainage Rules. Stormwater will be collected and managed through a drainage system that will include on-site surface and sub-surface drainage basins or chambers. These systems will be designed so that there will be no increase in the peak rate of stormwater runoff leaving the property compared to existing conditions. Best Management Practices (BMP's) will be implemented during the construction and operation phases of the development to protect coastal water quality. Construction BMP are temporary measures installed before commencement of construction and removed after the site has been stabilized and the permanent measures are in place. Temporary construction measures include but are not limited to dust screens, silt fences, filter berms, fuel containment berms, and tire cleaning pads. Construction BMP must also conform to the provisions of Chapter 20.08 - Soil Erosion and Sediment Control of the Maui County Code.

Permanent BMP are measures that are part of the project and will remain in place after the construction is completed. Permanent measures are intended to reduce storm water pollution generated from the development of the project site. The use of detention basins, grassed swales, and permanent grassing and landscaping of exposed areas will be implemented to provide a level of stormwater filtration and pollution control. (Section II.D.3, Drainage, contains the full discussion.)

15 Water - The MRTP currently receives its potable water from the County of Maui, Department of Water Supply. The Park's non-potable water is supplied by the Kihei Wastewater Reclamation Facility (KWWRF) R-1 treatment plant. Maui R&T Partners, LLC prefers to continue to source its water from these two sources. However, because current County policy does not allow for the Department of Water Supply to commit to providing water for future subdivisions, the Applicant will develop and treat on- or off-site brackish well water for potable drinking water and non-potable drinking water use, as demand warrants. (Section II.D.4, Water, contains the full discussion.)



16. Wastewater - The design average wastewater flow from the MRTP at build-out is expected to be approximately 0.60 mgd. The County of Maui currently treats approximately 3.4 mgd of average daily wastewater flow at the KWWRF. According to the County of Maui, Wastewater Reclamation Division records, as of ~~June 30, 2011~~, November 20, 2012 the cumulative wastewater flow allocated at the KWWRF is approximately ~~6.75~~ 6.8 mgd. The KWWRF has a capacity of 8 mgd, which means that there is approximately ~~1.25~~ 1.2 mgd of available treatment capacity based on wastewater flow allocated at KWWRF, and 4.6 mgd based on average daily flow. Thus, there currently is adequate capacity to accommodate the project. On and off-site infrastructure to transmit the wastewater to the KWWRF will include gravity sewerlines, force mains, upgrades to existing wastewater pump stations and new pump stations, where warranted. (Section II.D.5, Wastewater, contains the full discussion).

17. Electrical - When fully built out, the electrical demand for the MRTP Master Plan update is forecast to be 38,750 kilowatts. Based on this anticipated demand, MECO anticipates that construction of a new substation will be required for Phase 1, along with associated electrical infrastructure, equipment and related easements. The current Master Plan includes adequate land for locating a new substation. The Master Plan proposes to underground existing overhead power lines that run north to south along the mauka boundary of the southern portion of the MRTP. These power lines will be placed underground as the project is built from the existing employment core towards the south. (Section II.D.6, Electrical, contains the full discussion.)

18. Communication and Cable TV Systems - Currently Hawaiian Telcom, Time Warner Telecommunications, and Wavecom Solutions have underground systems in place at the MRTP. Additional infrastructure may be necessary to accommodate the proposed residential and commercial expansion. (Section II.D.7, Communication and Cable TV Systems, contains the full discussion.)

C. RELATIONSHIP TO GOVERNMENTAL PLANS, POLICIES AND CONTROLS

1. State Land Use Law, Chapter 205, Hawaii Revised Statutes - The State Land Use Law (Chapter 205, HRS) establishes four (4) major land use districts in which all lands in



the State are placed. These districts are designated as *Urban*, *Rural*, *Agricultural*, and *Conservation*. The lands of the MRTTP lie within the State *Urban* and *Agricultural* districts.

The Master Plan Update will require a State Land Use District Boundary Amendment from *Agricultural to Urban* for certain lands in the MRTTP. The total land area expected to be affected comprises approximately ~~256.243~~ 253.05 acres and is identified by Tax Map Parcels (2) 2-2-024:16 and 17 and a portion of (2) 2-2-002:54 (hereafter “Parcels 16, 17, and 54 por”). Additionally, the proposal would require amendments to the conditions placed upon currently urbanized lands, comprising approximately ~~157.76~~ 157.887 acres. Decision making criteria to be used in the LUC review of petitions for reclassification of district boundaries is found in Section 205-17, HRS and Section 15-15-77, HAR. In addition, standards for determining the Urban district are contained in Section 15-15-18. The Master Plan Update complies with these criteria and standards (See: Section IV.B, “State Land Use”).

2. Hawaii State Plan, Chapter 226, Hawaii Revised Statutes – The Hawaii State Plan (Chapter 226, HRS) establishes a set of goals, objectives, and policies that serve as long-range guidelines for the growth and development of the State. The MRTTP Master Plan Update is relevant to many of the goals, objectives, and policies set forth by the Hawaii State Plan (See: Section IV.B, “Hawaii State Plan”).

3. Hawaii State Functional Plans – The Hawaii State Plan directs State agencies to prepare functional plans for their respective program areas. There are 14 State functional plans that serve as the primary implementing vehicle for the goals, objectives, and policies of the Hawaii State Plan (See: Section IV.D, “State Functional Plans”).

4. Maui County General Plan – The General Plan of the County of Maui refers to a hierarchy of planning documents that together set forth future growth and policy direction in the County. The General Plan is comprised of the following documents: 1) County-wide Policy Plan; 2) Maui Island Plan; and 3) nine community plans.

The County-wide Policy Plan was adopted in March 2010 and is a broad policy document that identifies a vision for the future of Maui County. It establishes a set of guiding principles and provides comprehensive goals, objectives, policies and implementing actions that portray the desired direction of the County’s future. The County-wide Pol-



icy Plan provides the policy framework for the development of the Maui Island Plan and nine Community Plans.

The **Maui Island Plan** was adopted in December 2012 and functions as a regional plan and addresses the policies and issued that are not confined to just one community plan area, including regional systems such as transportation, utilities, and growth management for the Island of Maui. Together, the Island and Community Plans develop strategies with respect to population density, land use maps, land use regulations, transportation systems, public and community facility locations, water and sewage systems, visitor destinations, urban design and other matters related to development. ~~The draft Maui Island Plan is currently under review by the County Council.~~ The Master Plan Update is very supportive of the policies of the County-wide Policy Plan and ~~Draft~~ Maui Island Plan (See: Section IV.E, “Maui County General Plan”).

5. Kihei-Makena Community Plan - Within Maui County, there are nine (9) community plan regions. From a General Plan implementation standpoint, each region is governed by a Community Plan which sets forth desired land use patterns, as well as goals, objectives, policies, and implementing actions for a number of functional areas including infrastructure-related parameters. The purpose of the community plan is to outline a relatively detailed agenda for carrying out these objectives.

The MRTP is located within the Kihei-Makena Community Plan region that was adopted by Ordinance No. 2641 on March 6, 1998. The majority of the park is designated Project District 6 (R&T Park) in the Community Plan, with a portion designated *Public/Quasi-public and Agricultural*. A Community Plan Amendment will be sought to bring the entire Park site into the proposed new “Maui Research and Technology Park District”, a community plan designation that better aligns with the vision of the Master Plan Update ~~and amendments to Maui County Code (MCC) Title 19.33~~ (See: Section III.E E, “Kihei-Makena Community Plan”).

6. County Zoning - Title 19 of the Maui County Code provides comprehensive zoning for the county. The purpose and intent of this comprehensive zoning is to regulate the utilization of land in a manner encouraging orderly development and to promote and protect the health, safety and welfare of the people of the County.



The Master Plan Update will require a Change in Zoning in order to bring the entire Park site into the proposed new “Maui Kihei Research and Technology Park District” (MCC Chapter Title 19.33A, MCC). ~~The proposed new “Maui Kihei Research and Technology Park District” (MCC Chapter Title 19.33A, MCC) which builds on~~ ~~whereas portions are currently zoned Agricultural. Changes will also be sought to the existing~~ language of Chapter 19.33, MCC, to allow for a more diversified development that comports with the vision of the Master Plan Update ~~to~~ The Master Plan Update will facilitate the creation of an integrated and vibrant mixed-use community focused around a regional knowledge-based industry employment base. (See: Section III.F, “County Zoning” and Appendix O Draft Zoning Ordinance Chapter 19.33A, MCC).

7. Coastal Zone Management Act, Chapter 205A, Hawaii Revised Statutes – The majority of the MRTP property is located approximately 1 mile (*mauka*) from the Pacific Ocean and is not located within the Special Management Area (SMA) boundary. However, the Applicant has provided a summary analysis of the objectives, policies, and guidelines, pursuant to HRS Chapter 205A-2 as part of this EIS (See: Section III.G, “Coastal Zone Management”).

D. REQUIRED PERMITS AND APPROVALS

A number of permits and approvals from State and County agencies will be required prior to commencement of construction. The following is a preliminary list of permits, which may be subject to change:

| Table 1, Required Permits and Approvals | |
|--|------------------------------|
| Permit/ Approval Required | Responsible Authority |
| HRS Chapter 343 Compliance | State Land Use Commission |
| State Land Use District Boundary Amendment (DBA) | State Land Use Commission |
| Community Plan Amendment (CPA) | Maui County Council |
| Change in Zoning (CIZ) | Maui County Council |
| Final Environmental Impact Statement (EIS) | State Land Use Commission |
| Section 404 Clean Water Act Approval | Department of the Army |
| Air Pollution Control Permit | State of Hawaii, DOH |



| | |
|--|--|
| Community Noise Permit | State of Hawaii, DOH |
| NPDES Permit | State of Hawaii, DOH |
| Section 401 Clean Water Act | State of Hawaii, DOH |
| Well Construction and Pump Installation Permit | State of Hawaii, DLNR-CWRM |
| Stream Channel Alternation Permit | State of Hawaii, DLNR-CWRM |
| Permit to Perform work within the State ROW | State of Hawaii, DOT |
| Preliminary Subdivision Approval | Maui County, Public Works, Development Services Division |
| Final Subdivision Approval | Maui County, Public Works, Development Services Division |
| Grading and Grubbing Permit | Maui County, Public Works, Development Services Division |
| Driveway Permit | Maui County, Public Works, Development Services Division |
| Building Permit | Maui County, Public Works, Development Services Division |
| Wastewater Discharge Permit | Maui County, Department of Environmental Management, Wastewater Division |
| Drainage Approval | Maui Department of Public Works, Engineering Division |
| Easements for Utilities and Roadways | Various |

Table 1 Required Permits and Approvals

| <u>Permit / Approval Required</u> | <u>Responsible Authority</u> | <u>Projected Submittal Date</u> |
|---|----------------------------------|------------------------------------|
| <u>HRS Chapter 343 Compliance</u> | <u>State Land Use Commission</u> | <u>March 2013</u> |
| <u>Final Environmental Impact Statement (EIS)</u> | <u>State Land Use Commission</u> | <u>April 2013</u> |
| <u>State Land Use District Boundary Amendment (DBA)</u> | <u>State Land Use Commission</u> | <u>June 2010, updated May 2013</u> |

Maui Research & Technology Park



| | | |
|---|---|--|
| <u>Community Plan Amendment (CPA)</u> | <u>Maui County Council</u> | <u>January/February 2014</u> |
| <u>Change in Zoning (CIZ)</u> | <u>Maui County Council</u> | <u>January/February 2014</u> |
| <u>Driveway Permit</u> | <u>Maui County, Public Works, Development Services Division</u> | <u>2014. These permits will be applied for in conjunction with construction of the next commercial building in the MRTP project area.</u> |
| <u>Building Permit</u> | <u>Maui County, Public Works, Development Services Division</u> | |
| <u>Wastewater Discharge (Hookup) Permit</u> | <u>Maui County, Department of Environmental Management, Wastewater Division</u> | |
| <u>Well Construction and Pump Installation Permit</u> | <u>State of Hawaii, DLNR-CWRM</u> | <u>2014. These permits will be applied for in conjunction with development of the project well water source.</u> |
| <u>Grading and Grubbing Permit</u> | <u>Maui County, Public Works, Development Services Division</u> | <u>2015. These permits will be applied for in conjunction with construction of the water treatment plant, storage tank and transmission line components of the Increment 1 potable water system.</u> |
| <u>NPDES Permit</u> | <u>State of Hawaii, DOH</u> | |
| <u>Air Pollution Control Permit</u> | <u>State of Hawaii, DOH</u> | |
| <u>Community Noise Permit</u> | <u>State of Hawaii, DOH</u> | |
| <u>Section 404 Clean Water Act Approval</u> | <u>Department of the Army</u> | <u>2015. These permits will be applied for in conjunction with the construction of the Makai Residential Area drainage basin's dis-</u> |
| <u>Section 401 Clean Water Act</u> | <u>State of Hawaii, DOH</u> | |



| | | |
|--|---|--|
| <u>Stream Channel Alternation Permit</u> | <u>State of Hawaii, DLNR-CWRM</u> | <u>charge outlet into Waipuilani Gulch.</u> |
| <u>Preliminary Subdivision Approval</u> | <u>Maui County, Public Works, Development Services Division</u> | <u>2015. These approvals will be sought in conjunction with the first commercial or residential subdivision application filed to facilitate development under the new MRTP Master Plan</u> |
| <u>Easements for Utilities and Roadways</u> | <u>Various</u> | |
| <u>Drainage Approval</u> | <u>Maui Department of Public Works, Engineering Division</u> | |
| <u>Final Subdivision Approval</u> | <u>Maui County, Public Works, Development Services Division</u> | |
| <u>Permit to Perform Work Within the State ROW</u> | <u>State of Hawaii, DOT</u> | <u>2016. This permit will be applied for in conjunction with construction of the Piilani Highway / Lipoa Parkway intersection improvements</u> |

(Section I.D, Entitlements and Approvals, contains discussion of the necessary entitlements and approvals.)

E. ALTERNATIVES

Five (5) alternatives to the Master Plan Update were considered. These alternatives include:

- ~~No Action Alternative;~~
- ~~No Residential Uses Alternative;~~
- ~~No Entitlement of Expansion Lands Alternative;~~
- ~~Commercial Mixed Use Alternative; and~~
- ~~Less Commercial and Residential Density Alternative.~~



1. No Action Alternative;
2. No Residential Uses Alternative;
3. No Entitlement of Expansion Lands Alternative;
4. Commercial Mixed-Use Alternative; and
5. Less Commercial and Residential Density Alternative.

(Section I.E, Alternatives, contains discussion of the alternatives.)

~~G. Summary of Cumulative and Secondary Impacts~~

~~Cumulative impacts are defined as the impact on the environment, which results from the incremental impact of an action when added to other past, present, and reasonably foreseeable future actions, regardless of what agency or person undertakes such other actions. Secondary impacts are those that have the potential to occur later in time or farther in the future, but which are reasonably foreseeable. They can be viewed as actions of others that are taken because of the presence of the project. Secondary impacts from highway projects, for example, can occur because they can induce development by removing transportation impediments to growth.~~

~~Taken together, regional population growth will increase demand on natural resources, infrastructure and public facility systems. As a precursor to preparing the Maui Island Plan, the County of Maui prepared the following infrastructure and public facility technical studies: Infrastructure and Public Facilities Issue Paper (September 2007), Public Facilities Assessment Update (March 2007) and Infrastructure Assessment Update (May 2003). These studies assess the impact of population growth on the island's infrastructure and public facility systems. In general, the studies conclude that on going public and private sector investment will be necessary to accommodate growth through 2030.~~

~~With the implementation and strict enforcement of all BMP's and mitigation measures required of new developments, it is not anticipated that significant cumulative impacts will occur to the region's natural and environmental resources. As documented in Section III.D of the DEIS, the MRTP will mitigate its impact on infrastructure and public facilities through a variety of on and off site infrastructure and public facility counter-measures. (See: Section V.C, "Cumulative and Secondary Impacts").~~



F. SUMMARY OF IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

Implementation of the Master Plan will result in the irreversible and irretrievable commitment of certain natural and fiscal resources. Major resource commitments include the land and capital, construction materials, non-renewable resources, labor, and energy required for the Plan's implementation. Impacts represented by the commitment of these resources must be weighed against the positive socio-economic benefits that could be derived from the project versus the consequences of either taking no action or pursuing another less beneficial use of the area (See: Section V.B "Irreversible and Irretrievable Commitment of Resources").

G. ~~SUMMARY OF CUMULATIVE AND SECONDARY IMPACTS~~

Cumulative impacts are defined as the impact on the environment, which results from the incremental impact of an action when added to other past, present, and reasonably foreseeable future actions, regardless of what agency or person undertakes such other actions. Secondary impacts are those that have the potential to occur later in time or farther in the future, but which are reasonably foreseeable. They can be viewed as actions of others that are taken because of the presence of the project. Secondary impacts from highway projects, for example, can occur because they can induce development by removing transportation impediments to growth.

Taken together, regional population growth will increase demand on natural resources, infrastructure and public facility systems. As a precursor to preparing the Maui Island Plan, the County of Maui prepared the following infrastructure and public facility technical studies: Infrastructure and Public Facilities Issue Paper (September 2007), Public Facilities Assessment Update (March 2007) and Infrastructure Assessment Update (May 2003). These studies assess the impact of population growth on the island's infrastructure and public facility systems. In general, the studies conclude that on-going public and private sector investment will be necessary to accommodate growth through 2030.

With the implementation and strict enforcement of all BMP's and mitigation measures required of new developments, it is not anticipated that significant cumulative impacts will occur to the region's natural and environmental resources. As documented in Sec-



tion III.D of the DEIS, the MRTP will mitigate its impact on infrastructure and public facilities through a variety of on- and off-site infrastructure and public facility countermeasures. (See: Section V.C, "Cumulative and Secondary Impacts").

H. SUMMARY OF UNRESOLVED ISSUES

There are unresolved issues that will need to be addressed prior to the initiation of the project through the project's phased development. Maui County Code Chapter 19.33 will need to be amended to accommodate the uses and development standards proposed in the Master Plan. It is not yet known whether these amendments will be adopted through the legislative process.

In response to comments from the DBEDT LUC, LUC Docket No. A84-585 is a unresolved issue. On November 9, 1984, Maui Economic Development Board, Inc. filed its Petition for District Boundary Amendment with the Land Use Commission, State of Hawaii ("LUC") to reclassify approximately 300 acres of land in Kihei, Maui from the agricultural district to the urban district to develop a high technology park in LUC Docket No. A84-585. The Applicant will request amendment to Docket No. A84-585 in order to make the project description consistent with the new Master Plan update.

Although the Project can develop an on-site source of ~~potable~~ drinking water, the preferred ~~potable~~ drinking water source is County water supplied by the Department of Water Supply. The MRTP will continue to work with the County to determine if County water can be committed to the project in lieu of a privately developed source. Planned and projected growth in Kihei-Makena to 2034, without Phase II of the Project, will trigger the need for a new north-south ~~bypass~~ oriented roadway mauka of Piilani Highway. The schedule for development of this roadway, appropriate cost sharing and funding sources are uncertain at this time. These issues will be resolved as the need for the roadway becomes more imminent (See: Section V.B D "~~Irreversible and Irretrievable Commitment of Resources~~ Unresolved Issues").



Table 1-1 Unresolved Issues

| <u>Issue</u> | <u>Parties Involved</u> | <u>Estimated Resolution</u> |
|--|---|-----------------------------|
| <u>Boundary Amendment Petition Docket No. A84-585)</u> | <u>MRTP, LUC, Office of State Planning</u> | <u>2013</u> |
| <u>New Zoning Ordinance</u> | <u>MRTP, County of Maui Department of Planning, Maui Planning Commission and Maui County Council.</u> | <u>2013</u> |
| <u>Drinking Water</u> | <u>MRTP, County of Maui DWS</u> | <u>2014</u> |
| <u>Mauka Roadway</u> | <u>MRTP, County of Maui, DPW, DP, DOT. State of Hawaii DOT.</u> | <u>2015</u> |



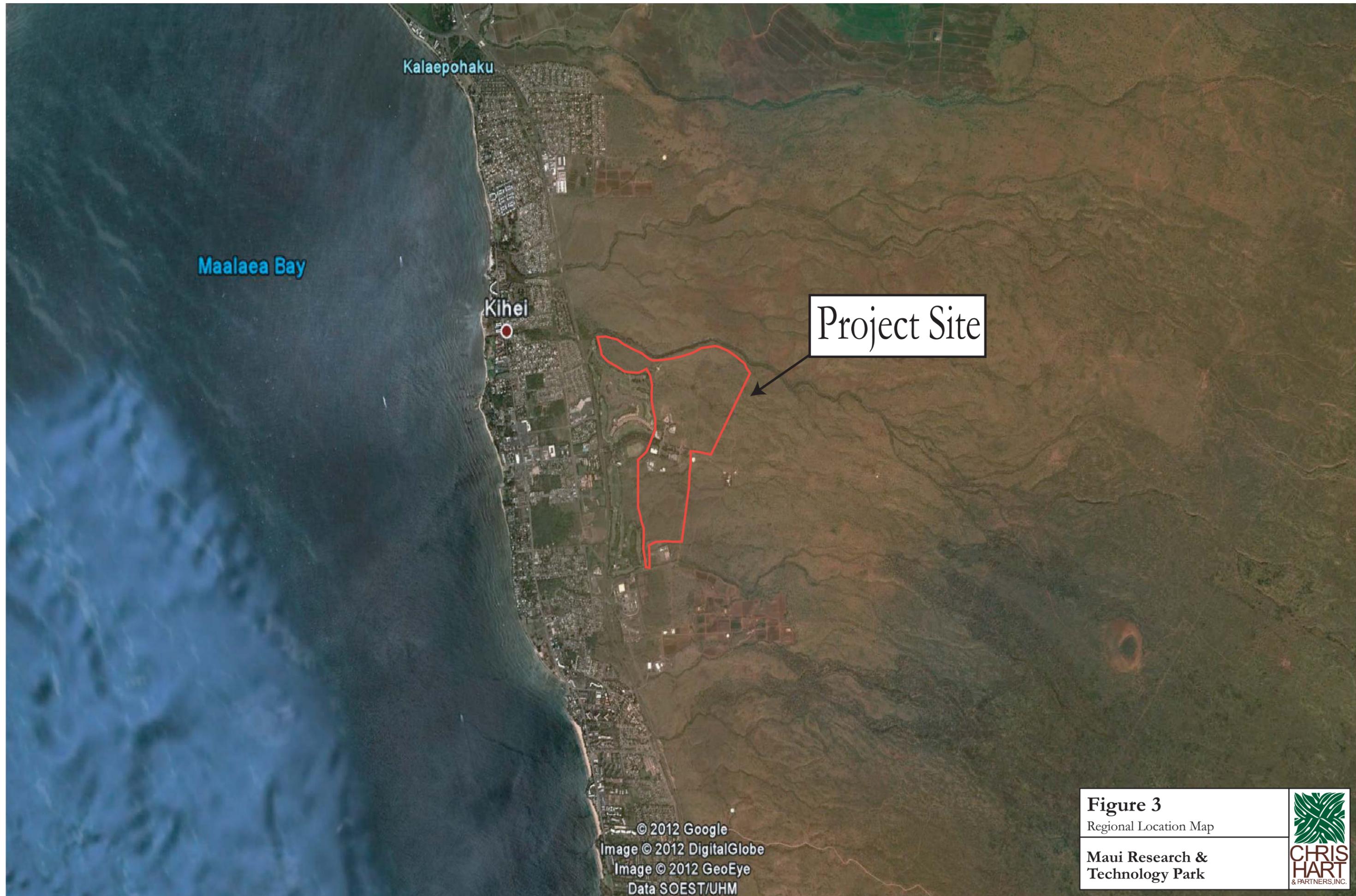
II. MRTP MASTER PLAN UPDATE DESCRIPTION

A. PROPERTY LOCATION

The Maui Research and Technology Park (hereafter “MRTP” or “the Park”) is located in central Kihei, in South Maui. See: Figure 3, “Regional Location Map” and Figure 4a-b, “Aerial Photographs”. The Park is situated *mauka* (landwards) of Pi’ilani Highway and is accessed by Lipoa Parkway. The ~~property~~ MRTP is identified by Tax Map Key Numbers (2) 2-2-024:1-9, 14-18, 31, 32, 34, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46 and a portion of (2) 2-2-002:54. (See: Figures 5a-b, “Tax Map Key”.)

B. LAND OWNERSHIP AND PROJECT APPLICANT

The lands comprising the MRTP, approximately ~~414~~ 411 acres, are owned in fee simple by various land owners. Maui R&T Partners, LLC (“Applicant”) owns approximately 231.229 acres and Haleakala Ranch is the owner of 123.843 acres. Roadway lots and lands in ownership by others comprise the remaining acres.



Maalaea Bay

Kalaepohaku

Kihei

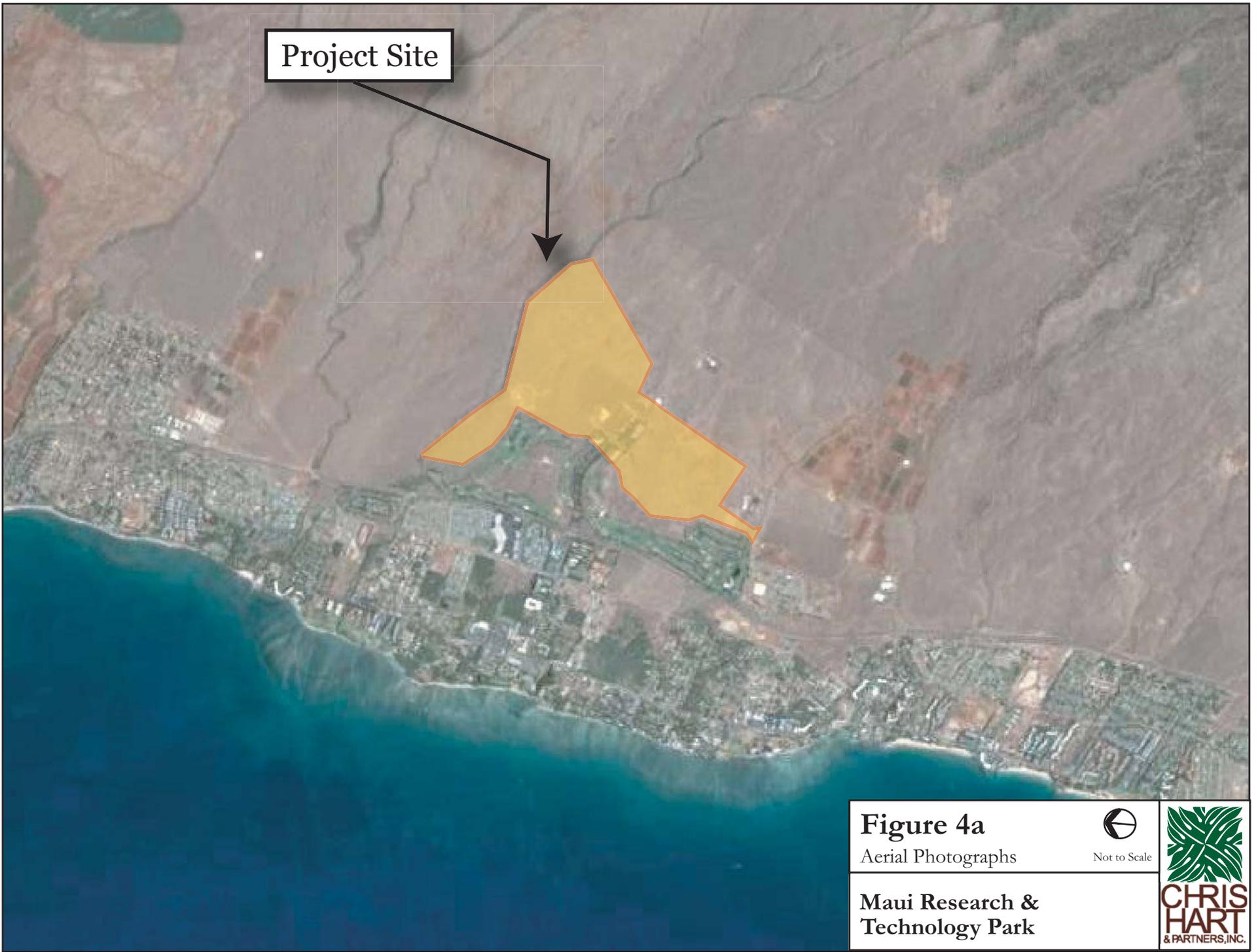
Project Site

© 2012 Google
Image © 2012 DigitalGlobe
Image © 2012 GeoEye
Data SOEST/UHM

Figure 3
Regional Location Map

Maui Research &
Technology Park





Project Site

Figure 4a
Aerial Photographs
**Maui Research &
Technology Park**


Not to Scale





Figure 4b
Aerial Photographs

**Maui Research &
Technology Park**



Project Site

Parcel 54 (por.)

Parcels 1 - 9, 14 - 17, 30, 31, 32, 34, 36, 37

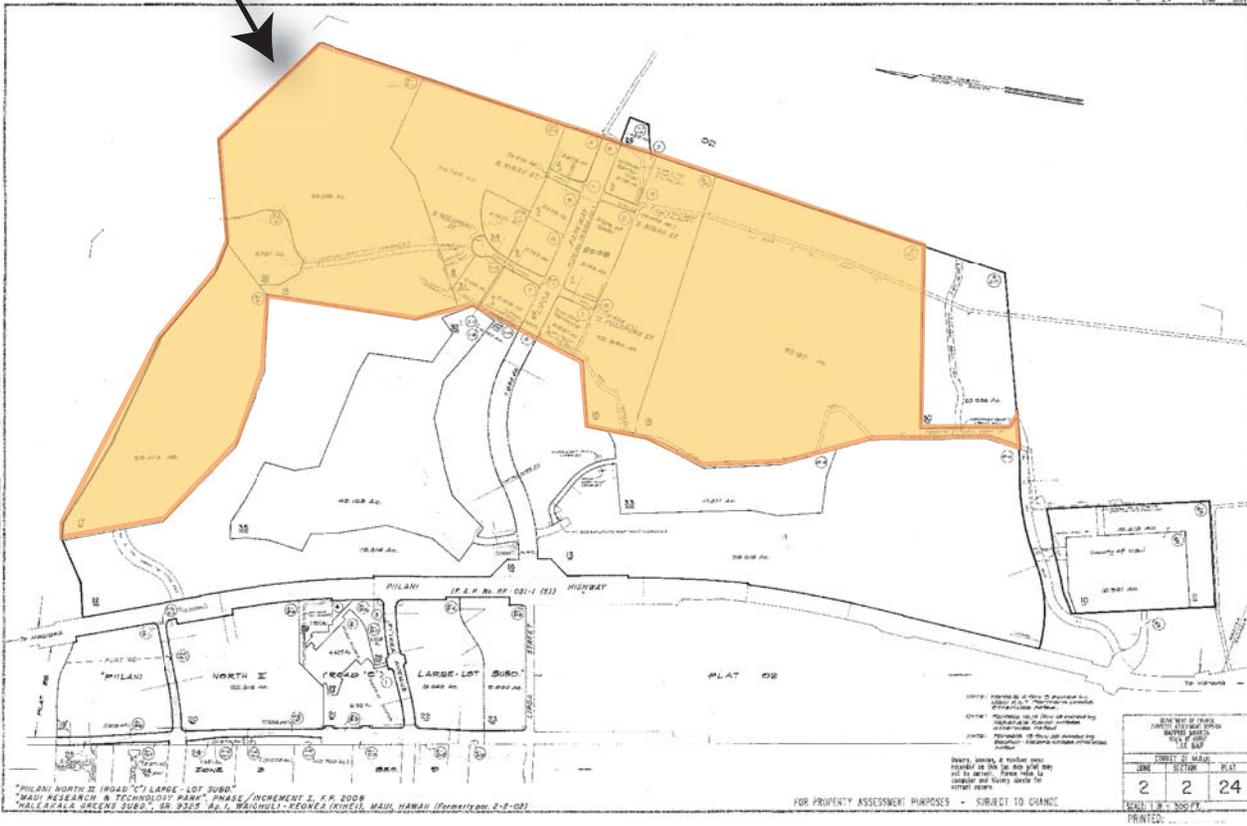
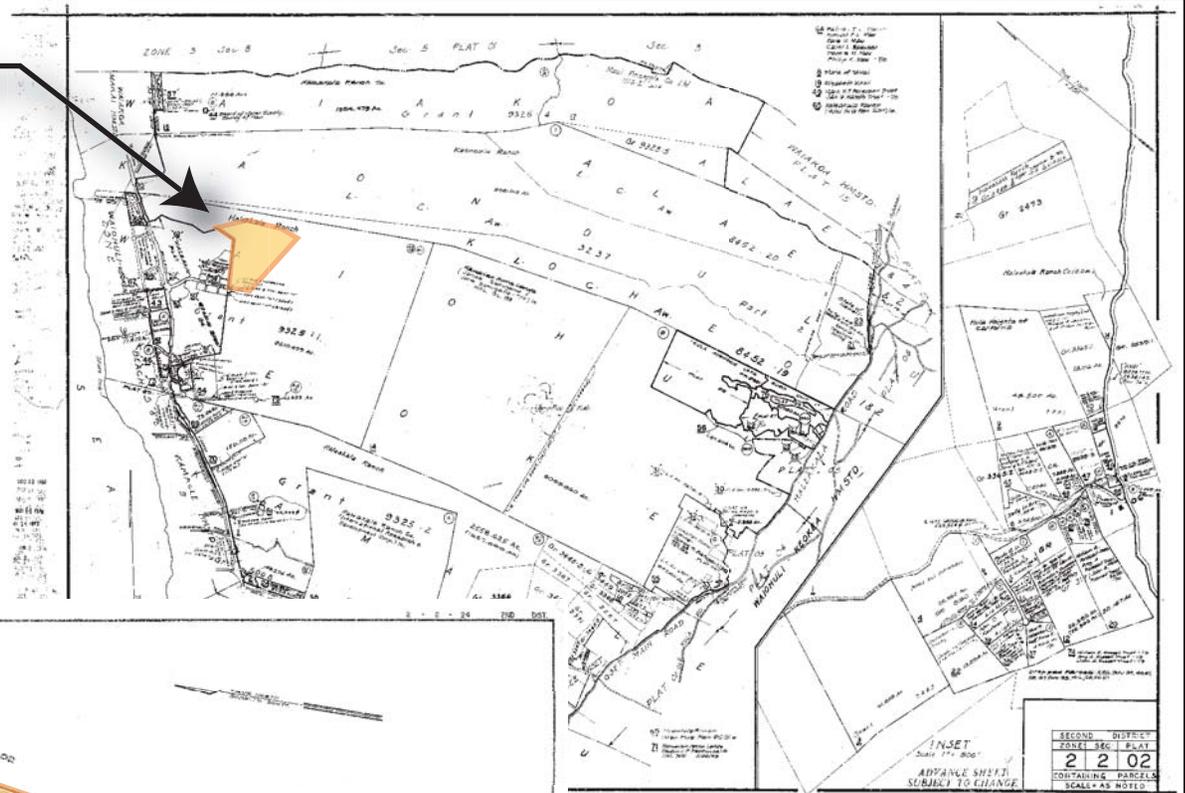


Figure 5a

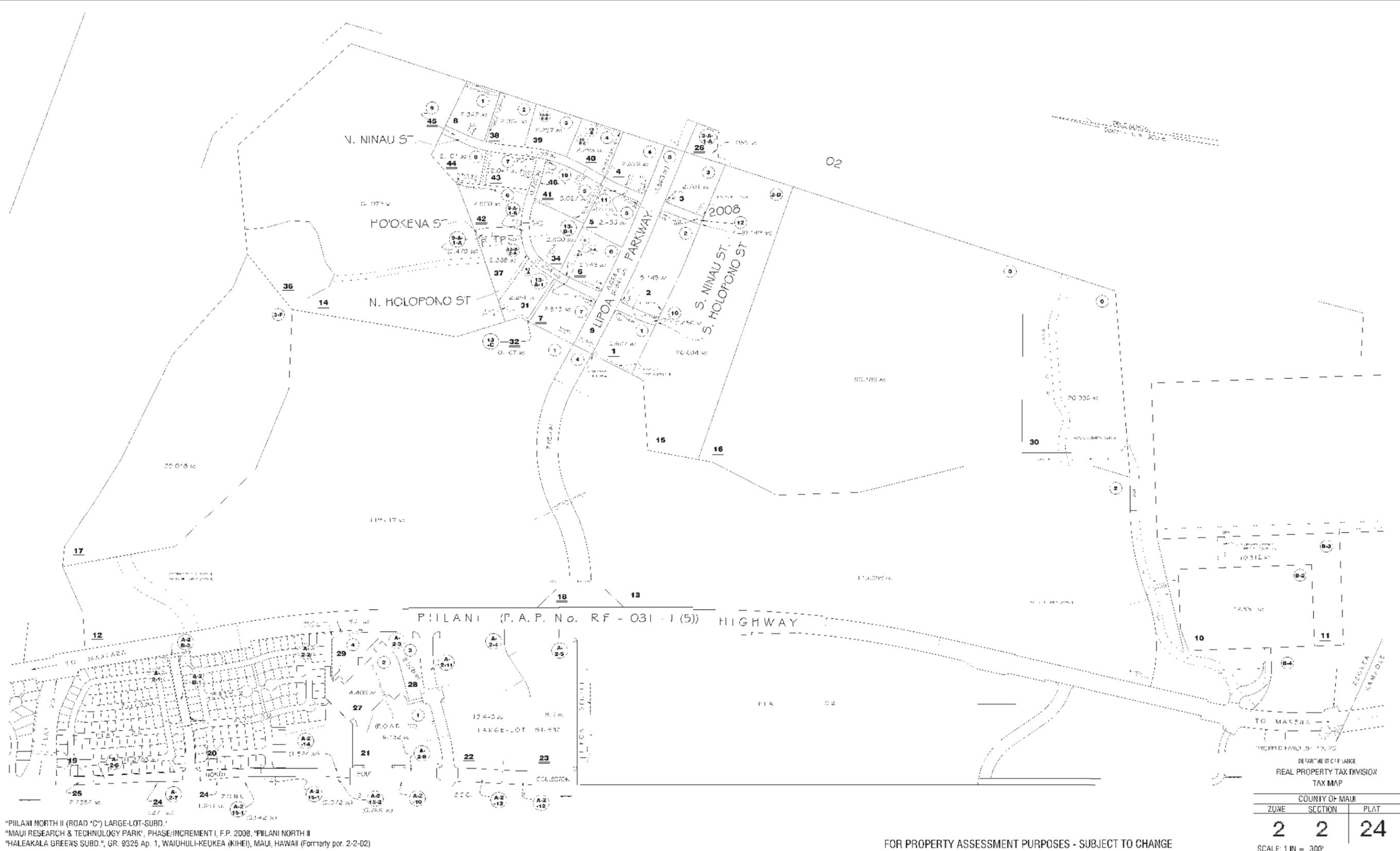
Tax Map Key

Not to Scale

Maui Research & Technology Park



DATE: 11/3/1989 BY: DTB SOURCE: DEPT-200 ENGINE NO: 7166



"PILANI NORTH II (ROAD 'C') LARGE-LOT-SUBD."
 "MAUI RESEARCH & TECHNOLOGY PARK", PHASE I INCREMENT I, F.P. 2008, "PILANI NORTH II"
 "HALEAKALA GREENS SUBD.", GR. 9325 Ap. 1, WAIQOHUHI-KEUKEA (KIHEI), MAUI, HAWAII (Formerly por. 2-2-02)

DEPARTMENT OF REVENUE
 REAL PROPERTY TAX DIVISION
 TAX MAP

| COUNTY OF MAUI | | |
|----------------|---------|------|
| ZONE | SECTION | PLAT |
| 2 | 2 | 24 |

SCALE: 1 IN = 300'

FOR PROPERTY ASSESSMENT PURPOSES - SUBJECT TO CHANGE

PRINTED:

Figure 5b
Tax Map Key

Note: Not to Scale

Maui Research & Technology Park





C. EXISTING AND HISTORICAL LAND USE

Prior to its development, the lands comprising the MRTP were part of the Haleakala Ranch. The MRTP was the vision of a core group of community leaders in the early 1980's who sought to diversify the economic and employment base on Maui beyond tourism and agriculture. The efforts to diversify Maui's economy by creating the requisite infrastructure (like the MRTP) were made possible via public/private alliances. Through these efforts, MRTP is the locus of Maui's technology industry and is home to a diverse range of companies and government projects. The companies work in a variety of areas; including computer science, disaster mitigation, information technology, high performance computing, space surveillance, scientific research, optics, and photonics. In response to comments from the State Land Use Commission and State Office of Planning Historical DBA Incremental Maps are provided in Appendix M of the FEIS and the following is a historical timeline of Land Use entitlement events for the MRTP:

- On November 9, 1984, Maui Economic Development Board, Inc. filed its Petition for District Boundary Amendment with the Land Use Commission, State of Hawaii ("LUC") to reclassify approximately 300 acres of land in Kihei, Maui from the agricultural district to the urban district to develop a high technology park in LUC Docket No. A84-585.
- On July 15, 1985, the LUC issued its Findings of Fact, Conclusions of Law and Decision and Order ("D&O"). The southern half of the petition area, comprising of approximately 150 acres, was reclassified to the urban district and the northern half of the petition area was approved for incremental districting.
- Figure 1-3 shows the current proposed project and identifies five areas identified as Areas A, B, C, D and E.
- Figure 1-4 depicts the LUC's ruling in its July 15, 1985 D&O by showing the urban district lands in the hatched area and the lands approved for incremental districting in the cross hatched area, as superimposed upon Areas A, B, C, D and a 20 acre area south of Area B.



- On September 11, 1985, Maui Economic Development Board, Inc. filed its Motion to Modify Petition and to Classify Approximately 300 Acres of Land Currently in the Agricultural District into the Urban District at Kihei, Maui, Hawaii ("Motion to Modify"). The Motion to Modify requested that approximately 111 acres of urban land be relocated to the northern half, keeping approximately 39 acres remaining in the urban district.
- On February 25, 1986, the LUC issued its Amended Findings of Fact, Conclusions of Law and Decision and Order ("Amended D&O") approving the Motion to Modify. Figure 1-5 depicts the LUC's ruling in its February 25, 1986 Amended D&O by showing the urban district lands in Areas A and C as hatched, and the lands approved for incremental districting in Areas B and D as cross hatched.
- On November 20, 2007, Maui R&T Partners, LLC ("MRTP") acquired a fee simple interest in the Petition Area. MRTP has since taken over the management of the Project as well as developing the new master plan for the Project.
- On June 23, 2010, MRTP filed its Petition for District Boundary Amendment in LUC Docket No. A10-787, for the reclassification of approximately 253.05 acres from the agricultural district to the urban district ("Petition"), comprised of Areas B, D and E on Figure 1-3. The Petition proposes a redesigned Project to implement a new sustainable community based on mixed uses that will allow for people to work, live and play within or near the Project.

To reconcile the differences in the prior project with the current Project, MRTP will also be filing a motion to amend the Amended D&O to allow for the additional mixed uses in Area C. The intent is for the motion to amend to be filed in time so that the hearings in both LUC dockets may be consolidated so that the entire new Project may be considered at the same time, where Areas A and C will be subject to LUC Docket No. A84-585 and Areas B, D and E will be subject to LUC Docket No. A10-787

Chapter 19.33 of the Maui County Code, *Kihei Research and Technology Park District*, was adopted in 1986 to allow the fulfillment of the vision discussed above. That Chapter provides specific uses allowed within the MRTP and procedures for permitting. (See: Appendix A, "Maui County Code, Chapter 19.33, *Kihei Research & Technology Park District*"). The *Kihei-Makena Community Plan* update of 1998 further identified the project as "Project District 6 (R&T Park)", with "the objective of encouraging the development of non-polluting research and technology on individual 1 to 5-acre sites planned and built



in accordance with specific standards and guidelines". Design guidelines were intended to encourage low-rise, low-density development with ample setbacks and open space, underground utilities, and architectural and signage controls in accordance with the Park's theme.

The Park currently contains five (5) buildings providing Class A commercial office space to 25 tenants. The individual buildings, with respective tenants for each, are listed below.

Maui Economic Development Board Building-Ke Alahele

- Akimeka, LLC
- Ardent Consulting, LLC
- Maui Economic Development Board, Inc.
- Pacific Disaster Center

Maui Research & Technology Center:

- Clear Wire
- Oceanit
- Schafer Corporation
- University of Hawaii

Park Plaza building:

- 21st Century Group
- Aloha Eye Clinic
- Edward Jones
- E.R . Williams
- Goodfellow Bros., Inc. Corporate Offices
- Gravier Corp.
- Margaret Garcia, DDS
- Pacific Defense Solutions
- Pelatron, Inc.
- Small Business Development Center/Business Research Library

Maui High Performance Computing Center:

- Research Corporation of the University of Hawaii

Premier Place:

- Air Force Research Laboratory Det 15
- Boeing
- Premier Mortgage



D. PURPOSE AND NEED

The MRTP was established in the 1980's to bring diversification to Maui's economy through investment in high technology. Today the Park has over 180,000 square feet of office space, with over 400 people working in the Park at over 20 high technology and professional services companies.

However, even with these achievements, the breadth and depth of employment opportunities is significantly less than what modern and progressively planned parks' are capable of delivering. The current MRTP is simply too inflexible to fully respond to the needs of an increasingly diverse high technology industry. The Park's current 2-acre minimum lot size makes it cost prohibitive for many small businesses to enter the Park. Moreover, fully entitled lots of sufficient size are not readily available for large campus type users. Furthermore, the Park's zoning ordinance prohibits mixed-use development. This prohibition has made the Park isolated from the types of goods, services and amenities that a high technology workforce desires. Current employees are required to drive to and from work and since few daytime amenities exist, the Park is entirely automobile dependent.

This Master Plan Update proposes to utilize the principles of New Urbanism and Smart Growth to transform the current, single-use large lot research and technology campus into an integrated and vibrant mixed-use community focused around a regional knowledge-based industry¹ employment base. While the current Park tenants provide a high-quality foundation on which to build, implementation of this vision will require broadening of the development standards to allow smaller lot sizes for use by smaller firms. Additionally, the list of permitted uses will include such diverse fields as media production, health sciences, education, health-care and support uses including professional services, restaurants, neighborhood serving retail, and housing. The Master Plan Update aligns with the ~~current draft of the~~ Maui Island Plan (Chapter 8, Directed Growth Plan), which supports the continued expansion of the MRTP.

¹ Industries characterized by highly-skilled workers in fields such as science and research, biotechnology, clean technology, information technology, disaster mitigation, education, healthcare and medicine, media production, and professional services and similar knowledge based organizations.



The approach has been developed following extensive research into successful employment centers in other locations. The research indicates that knowledge based industries are attracted to locations offering not only office and lab space, but support services and amenities, including a mix of workforce housing opportunities for employees, commercial, neighborhood serving retail, professional services and parks and open spaces.

The Applicant has engaged the internationally recognized urban design and land planning firm Calthorpe Associates to prepare the Master Plan Update (See: Appendix M, Q “MRTP Development Code”. The firm’s planning team - led by firm founder Peter Calthorpe, one of the pioneers of New Urbanism - has developed a Concept Master Plan illustrating the vision and potential opportunities for the Park (See: Figure 6, “Overall Concept Diagram”).

Maui Research & Technology Park

OVERALL CONCEPT DIAGRAM

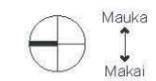


LEGEND

- Project Boundary
- Mixed-Use
- Knowledge Industry
- Knowledge Industry Expansion
- Residential & Expansion
- Open Space / Parks

FIGURE NO. 6
OVERALL CONCEPT DIAGRAM
MAUI RESEARCH & TECHNOLOGY PARK
 Kihei, Maui, Hawaii

March 20, 2012





E. PROJECTED MARKET DEMAND

A market study was conducted for the project by the Hallstrom Group Inc. and is included in the Economic and Fiscal Impact Assessment report in Appendix H. The market study forecasts demand for commercial, industrial and residential development within Kihei-Makena through the 2035 planning horizon. The study seeks to answer whether there is sufficient demand to absorb the various “marketable” components of the subject community during a reasonable exposure period given competing developments and projected statewide / regional market trends.

The "Kihei-Makena Study Area" is a suburban coastal community, with residential-oriented uses in the inland areas (housing units, neighborhood commercial and limited industrial), and resort/vacation-oriented uses dominating the shoreline (condos, hotels, timeshare and destination resorts). It has expanded dramatically in the past three decades, growing four-fold in resident population, adding nearly one million square feet of commercial and industrial floor area and more than 2,500 visitor units, and evolving into a major hub of Maui investment and business activity. Forecasts are the study area population will increase from the current figure of 27,500 to between 42,000 to 46,000 by 2035 (a gain of 53 to 67 percent), and increase its importance in the island's economy; particularly as Makena Resort experiences further development and the Maui Research & Technology Park (MRTP), Honuaula and other masterplanned projects are manifest.

Kihei-Makena is presently a secondary commercial center of Maui, meaningfully behind Kahului-Wailuku, with an estimated 700,000 square feet of commercial floor space, or 16 percent of the island total. As Kihei-Makena contains 24 percent of the de facto population of Maui, it can be asserted it is “under-serviced”. The vacancy rate on the island for retail restaurant and service/support commercial floor space is currently at just over nine percent; the highest level in many years. Rents have stabilized since mid-decade, and net absorption for the year was a negative 11,297 square feet, the smallest loss since 2008, and an indication the sector has stabilized and is likely to return to a positive absorption stance in 2012-13. Tenant stability is relatively high in Kihei-Makena (particularly compared to West Maui), with increasing interest being expressed in vacant bays as the market continues through its recovery phase.

The study area industrial space sector has approximately 850,000 square feet of inventory, or less than eight percent of the total amount built on Maui; again, indicating the



region is under-serviced. The majority of space is in storage/warehousing, staging, small businesses and quasi-commercial uses. Island-wide the vacancy rate for industrial floor area is about 2.0 percent (well below the State average of 4.8 percent), and though the sector showed a negative absorption of 74,764 square feet in 2011, the fourth quarter achieved a meaningfully positive absorption of 48,444 square feet; a sign of initial recovery. Brokers report a renewed interest in Greater Kihei industrial spaces, with several owner/user and multi-tenant buildings under construction or in the final approval stages.

The following summarizes the market study's conclusions:

- The demand for new residential units in the Kihei-Makena Corridor will be from 7,760 to 12,009 units over the next 24 years to 2035. The number of existing unsold and planned resident housing units within the ~~Draft~~ Maui Island Plan's regional "Urban Growth Boundary", excluding the MRTP, totals some 6,634 units. This indicates there will be a shortfall in the sector from 1,126 to 5,357 new residential units; with a mid-point under-supply of 3,251 units. The analysis indicates there will be sufficient unmet demand to absorb the 1,250 units of subject inventory.
- The proposed 750 single-family homes/lots of the subject development will require approximately 14 years to be absorbed following commencement of pre-sales in 2017. Approximately 56 percent of the proposed product should be single family (homes or lots) and 44 percent multi-family.
- The proposed 500 multifamily units will sell-out in 13 years.
- There will be demand for an additional 907,000 to 1,506,000 square feet of gross leasable floor space in Kihei-Makena by 2035, more than doubling the existing inventory, as Kahului lands are built-out, the Kihei population continues to increase, and the importance of the study area in the island's economy expands. This equates to an additional 81 to 141 acres of vacant gross land area to support expected market needs.
- Assuming historic economic trends continue it is estimated that the demand for additional industrial floor space on Maui over the next 24 years (through 2035) will total from 5.3 million to 6.7 million square feet, an increase of from 49 to 63 percent above current levels. This equates to a demand for between 466 to 599 gross acres of underlying sites at prevailing "business park" densities; signifi-



cantly more acreage (two to three times greater) if base yards, quarries, and open storage uses are included.

- On a gross basis, there is sufficient existing and proposed vacant industrial land on the island to meet demand, with some 2,000 potential acres apart from the already zoned subject holdings. However, this acreage includes heavy industrial, restricted use (airport and harbor), agricultural-oriented (Puunene sugar mill), dump and waste transfer sites, outlying locations, and other noncompetitive properties which severely decrease the amount of land available to meet demand.
- Based on its locational attributes, timing of development, availability of competitive sites in Kihei-Makena, revisions to the restrictions in MRTP, and other factors, it is estimated that the subject project could capture from 1.1 million to 1.5 million square feet of the projected demand on Maui under an "historic economic growth trend" perspective (with a mid-point of 1.3 million square feet); or about 21 percent of the island-wide demand during the projection period.
- As the Maui economy continues to grow and diversity over the next generation, there could be numerous educational, institutional and business/R&D uses possibly seeking out a Maui location. Such uses require from 30 to 200 acre sites for facilities/campuses of between 300,000 and 1.1 million square feet of floor space.

F. MRTP MASTER PLAN OVERVIEW

1. Regional Context

The MRTP site is located mauka (east) of the intersection of Pi'ilani Highway and Lipoa Parkway (called Lipoa Street makai of Pi'ilani Highway). The Pi'ilani Highway runs parallel to the makai boundary of the project and is a four-lane arterial providing north-south access between North Kihei and Wailea.

Central Kihei, in proximity of the MRTP, has a variety of development, including mid-range hotels and resort-oriented condominium developments, single-family homes and multi-family units. There are several large shopping centers, schools, parks, and civic facilities within a short drive of the project site (See: [Appendix Q "MRTP Development Code"](#) & Figure 7, "Regional Context Map"). These include the Azeka Shopping Center near of the intersection of South Kihei Road and Lipoa Street. Pi'ilani Shopping Center is



one block north of Lipoa Street and just makai of Pi'ilani Highway. There are also several parks located in close proximity to the project site, such as the three (3) Kamaole Beach Parks, Charley Young Park, Kalama Park and South Maui Community Park. Other recreation facilities include the Kihei Aquatic Center and the Kenolio Recreational Complex, both a short distance from the project site. The State Department of Education's public schools within proximity of the site include Kihei Elementary School, Loke-lani Intermediate School and the Kihei Charter School. The future Kihei High School is proposed for development adjacent to the northwestern boundary of the subject property, ~~along~~ mauka of Piilani Highway.

The nearest police station is approximately 2.5 miles from the MRTP. A new region-serving police station is ~~planned~~ under construction approximately 1 mile south of the project site on the mauka side of Pi'ilani Highway. The nearest fire station is approximately 1 mile from the site.

The MRTP is envisioned to continue to serve as a major employment generator for the island of Maui. As compared to traditional commercial and industrial districts, the MRTP will market itself primarily to high-technology, knowledge and innovation based businesses and institutions. The MRTP has approximately 400 employees working within the Park, in a host of high-technology based fields. The updated MRTP project will provide an appropriate location for significant growth of diversified employment in the region.



Figure 7
 Regional Context Map
Maui Research & Technology Park
 Source: Calthorpe Associates





2. Existing Site Conditions

Existing development in the MRTP is on five parcels. Buildings are one and two stories, and all development (as required by the existing design guidelines) sits behind deep setbacks, usually filled with surface parking lots. Roads have sidewalks, and large canopy street trees are a dominant feature. From a master planning perspective, the most significant opportunity on the site is the presence of an existing employment base. An employment base is often the most difficult element to create for creation of walkable mixed-use communities.

The most significant challenge at the site is its relative physical and visual isolation created by the Pi'ilani Highway. A golf course lies between the Park and the highway, leaving the park with no highway frontage. The one road access, Lipoa Parkway, is currently two lanes with a very wide right-of-way which will easily accommodate four lanes. There are no through roads in the MRTP, which leaves the existing site to be dependent upon Lipoa Parkway for ingress and egress. The Park is surrounded by undeveloped land on the north, east and south.

As for topography, the site generally falls to the west towards the ocean. The slope is typically gradual, with some areas of steeper terrain including several small gulches. A large gulch (Waipuiani Gulch) lies just outside the site's northern boundary. The site offers significant view opportunities towards the Pacific Ocean, West Maui Mountains and Haleakala.

Access and visibility for the site are extremely limited. Hidden by topography and the golf course, the site is most visible on Pi'ilani Highway by its entry sign at Lipoa Parkway. A development of executive golf course homes is currently under way in the golf course *makai* of the MRTP. Haleakala Ranch has indicated an interest in developing Ranch property on the north and *mauka* sides of the Park and has requested that these lands be incorporated within the Maui Island Plan's Urban Growth Boundary. The timeline for this development is unknown, and no formal entitlement applications have been filed with the State or County. This adjacent development would help to make the Park less isolated, would help to support employment and retail uses in the Park, and would



necessitate the creation of connections to the Park (See: Figure 8, “Existing Site Conditions” and Figure 9a-d, “Site Photographs”).

3. Master Plan Approach

The MRTP’s mission of job creation and diversification of the island’s economy remains one of vital importance. The Park retains many advantages, not the least of which is the high amenity value of life on Maui. But there are also a variety of factors that have impeded hoped-for growth. Among these factors are the physical and visual isolation of the Park; offshore perception of Maui as a destination for leisure, not business; a lack of flexibility created by restrictive zoning and design guidelines; a lack of some of the public amenities valued by knowledge workers; and the lack of flexible, cheap space for use by entrepreneurs for growing businesses. Although the Master Plan Update may have limited success in changing the general offshore perception of Maui, the Plan does try to address the challenges posed by the Park with a variety of strategies. These can be broadly grouped into two categories: creating a place and diversifying the offering.

Creating a Place

It has been 25 years since the original controlling documents were prepared for the MRTP. During this period urban planning design philosophy and strategy has changed dramatically in response to the impacts of auto-centric development patterns. It is now broadly understood that segregation of land uses and low density development patterns creates automobile dependence, increases the cost of development, exacerbates environmental impacts and produces sterile and uninspiring community design.

Research into the growth of businesses in Silicon Valley and other tech centers have shown the value of a mixture of uses and activities. For businesses and cities alike, the healthiest situations arise where there is a mixture of elements. Businesses thrive in these mixed environments, especially young businesses which depend on the business connections made available by diverse environments and the labor pool which comes with these areas. The younger, highly-educated, highly-motivated knowledge workers which make up this labor pool are drawn to these environments and become a kind of natural resource that in turn attracts and creates businesses. This understanding has been recognized in prominent economic development publications like the 2008 report by the Association of University Research Parks, “The Power of Place.” Among that report’s recommendations was to:



“Build Sustainable Communities of Innovation: Incentives for sustainable ‘smart growth’ development should be central to establishing American Innovation Zones. The U.S. Department of Housing should explore best practices nationally to encourage density and mixed-use development in American Innovation Zones in urban areas, which will encourage researchers and entrepreneurs to live where they work, and reduce sprawl.”²

Creating a “place”, a location which people are drawn to, involves a combination of factors. Among others, these factors include a diversification of land uses and creation of an attractive and welcoming public realm. In order to create a place, the Master Plan Update proposes a diversification of land uses within the Park. The addition of housing, retail, civic, and open spaces to the Park will add amenities for business attraction and retention. While the Plan does not contemplate addition of a large amount of retail, local serving retail such as coffee shops, restaurants, dry cleaners and businesses services will be amenities for employees of the Park. Civic uses such as a school or a library may also serve as amenities.

² The report “The Power of Place: A National Strategy for Building America’s Communities of Innovation,” October 2008, by the Association of University of Research Parks, can be found online at http://data.memberclicks.com/site/aurp/The_Power_of_Place.pdf



1. View of Maui High Performance Computing Center from Lipoa Parkway.



2. View of Premier Place from Lipoa Parkway.



3. View of Maui Economic Development Board Building- Ke Alahele from N. Holocono St.



4. View of Maui Park Plaza Building from N. Holocono St.



5. View of Maui Research & Technology Center from Lipoa Parkway.

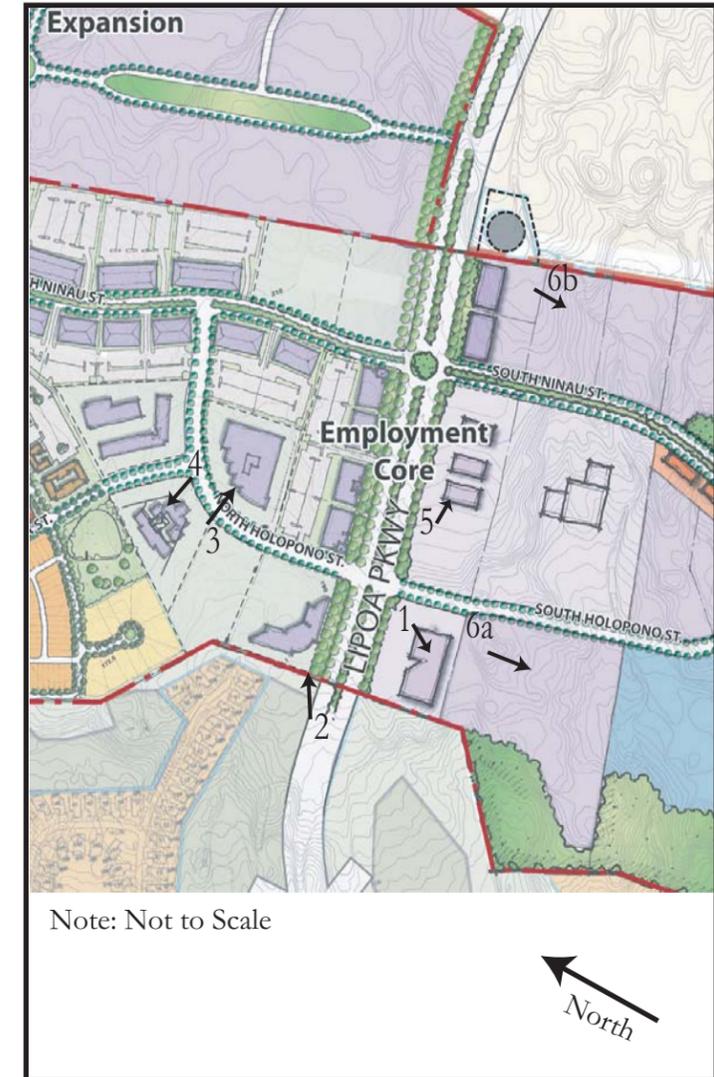


6a.

6b.

6a. View of Wind Turbine Storage located behind High Performance Computing Center.

6b. View of Solar Panel Array located makai of the water storage tank.

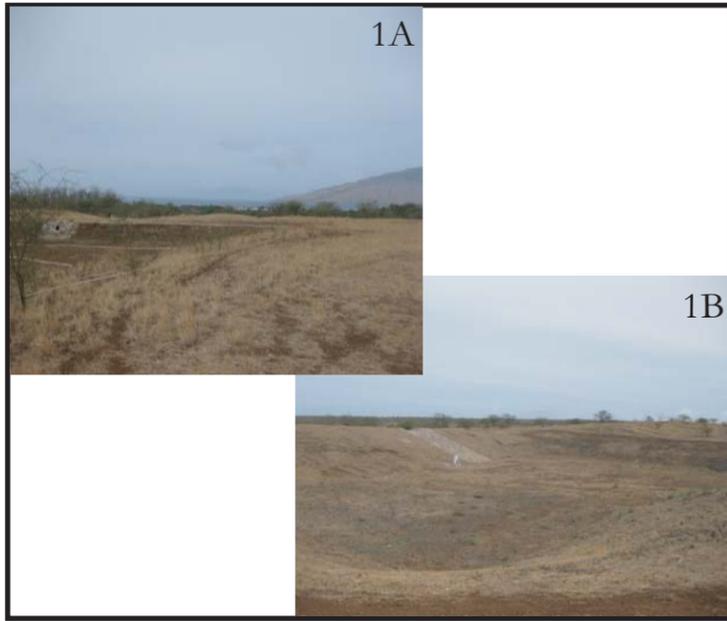


Employment Core

Figure 9a
Site Photographs

Maui Research & Technology Park





1. View of existing detention basins in the Mixed Use Center.



2. Makai view from Mixed Use Center.



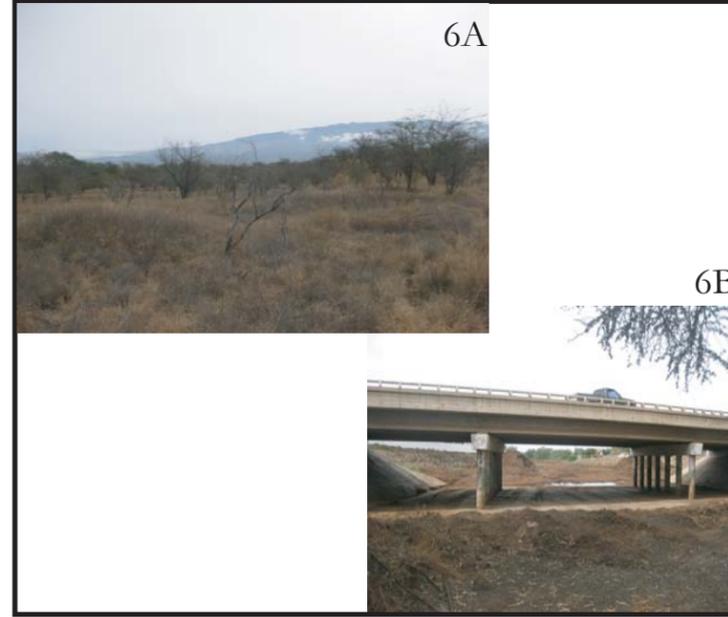
3. Mauka view from Mixed Use Center area.



4. Makai view of West Maui Mountains from the Residential area.

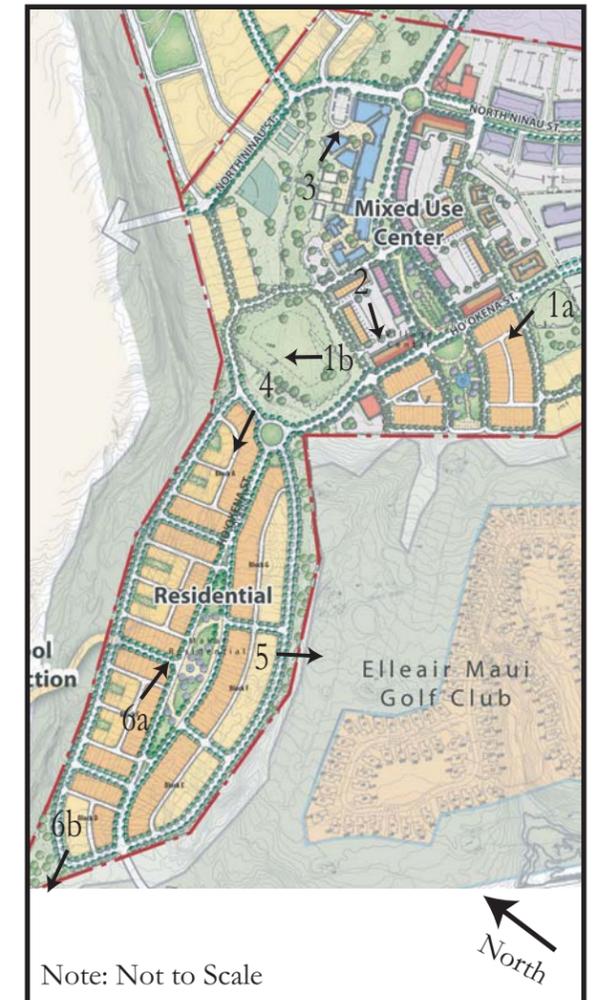


5. View from Residential area towards the Elleair golf course and existing homes.



6A. Mauka view of Haleakala from Residential area.

6B. View of Waipulani Gulch at Piilani Hwy looking makai.



Village Center and Residential Makai (Phase 1)

Figure 9b
Site Photographs

Maui Research & Technology Park

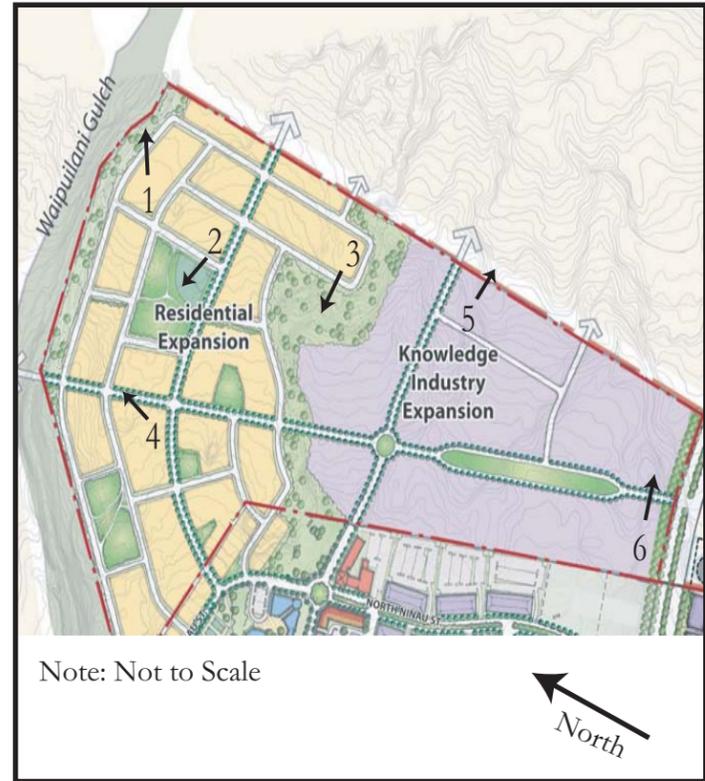




1. View of Waipuilani Gulch at the northern edge of the Residential Expansion area.

2. Makai view from Residential Expansion area looking towards the West Maui Mountains.

3. Mauka view from Residential Expansion area looking Northwest towards West Maui Mountains.



4. View of Residential Expansion Area looking Northeast towards Pu'unene.

5. View of Haleakala from Knowledge Industry Expansion area.

6. View of Haleakala and extension of Lipoa Parkway from Knowledge Industry Expansion area.

Residential & Knowledge Industry Expansion areas (Phase 2)

Figure 9c
Site Photographs

Maui Research & Technology Park

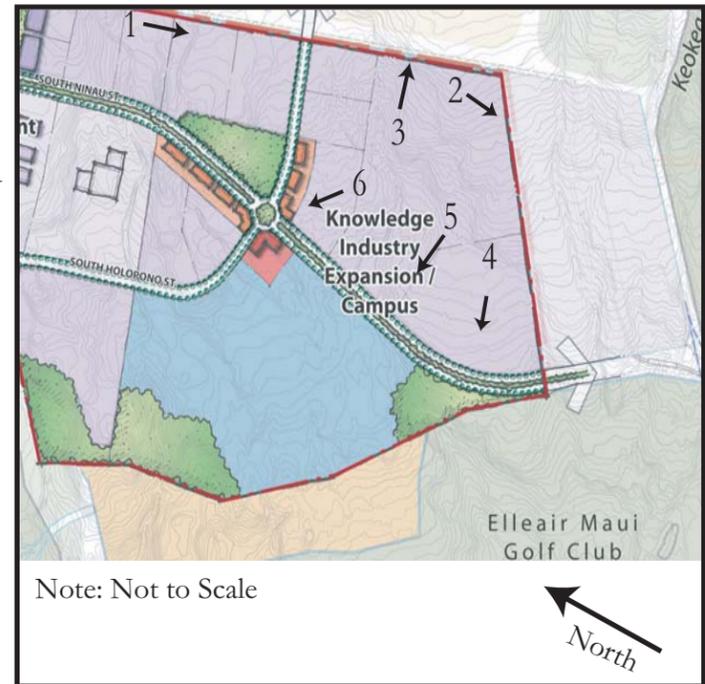




1. Existing boundary fence (above) & existing R-1 reclaimed water line connects MRTP to KWWRF (lower picture)

2. Existing Electrical lines (above) & Bio-Real building in the background.(lower picture)

3. View of Haleakala from Knowledge Industry Expansion Campus area.



4. View of Ocean from the Knowledge Industry Expansion/Campus area.

5. View of West Maui Mountains from Knowledge Industry Expansion area.

6. View from Knowledge Industry Expansion/Campus area with MRTP in the background.

Knowledge Industry Expansion/Campus areas (Phase 2)

Figure 9d
Site Photographs

Maui Research & Technology Park





Residential development, especially development with a wide variety of unit types targeted toward workers in the Park, would also be an amenity helping businesses in the Park attract and retain qualified workers and reducing the barrier of the high cost of housing on the island.

Put together, the combinations of existing businesses and employees in the Park, new businesses which will be created and attracted, housing, retail, open space, and civic elements will create a true neighborhood in place of the isolated, single use Park that exists today.

Diversifying the Offering

The original MRTP strategy, as reflected in the controlling ordinances and subsequent development pattern, is most suited to attracting mid-size businesses which have been in existence for some time. However, the Park's existing strategy is destined to miss out on many opportunities to achieve the Park's ultimate purpose, which is the diversification of Maui's economy with high skilled, high paying jobs.

The Master Plan Update proposes three (3) strategies to "diversify the offering". First, the Plan will provide a wide variety of spaces, especially small, inexpensive, flexible spaces which will allow entrepreneurs to begin and grow businesses. The Plan proposes a great diversification in the Park's offering of spaces for business. One strategy to achieve this will be the revising of the Park's zoning ordinance guidelines. The revised zoning ordinance guidelines protects essential aspects of the park but loosen many of the onerous restrictions on business development in the Park. For example, large minimum lot sizes and deep setback requirements promote a certain aesthetic vision that unfortunately serves to exclude many possible park tenants, such as those who do not need or want a large building or parcel of land. A more open set of regulations can still serve to create an attractive setting, while allowing businesses to create facilities that respond more closely to their own needs.

Second, the Master Plan Update proposes a variety of parcel sizes. This element of the physical plan will allow the Park to maximize job creation by being opportunistic, seizing every chance at business attraction. While still providing parcels at current sizes of approximately two acres, the Plan subdivides some into smaller users. At the same time,



the Plan maintains space for a large, “campus”-scale user, should the opportunity arise to accommodate one in the Park.

Third, the Plan proposes to be more inclusive to attract the high skill, high paying jobs so vital to Maui’s economy. While the goal of attracting “high technology” is a good one, other quality jobs broadly falling in the category of “knowledge industries”³ should also be pursued. The Park’s mission of economic development will be facilitated by the flexibility to attract many different knowledge businesses. The addition of new employees will aid in creating a critical mass in the Park, benefiting the effort to make the MRTP into a place, moving beyond its current state as an isolated, single use zone.

4. Design Principles

Well-designed places function far more efficiently than poorly-designed ones do. Well-designed places have positive effects on the environment, on individual health and well being, and on the long-term economic viability and adaptability. Well designed places are also better and more enjoyable places for people to live and work, which has made good design an important element in efforts to create economic development.

The Master Plan Update has grouped the major concerns of urban design into four categories:

- Conservation and restoration of the environment,
- Economic and social diversity and balance,
- Human and pedestrian scale in public and private realms, and
- Connections and interdependence between neighborhood, town and region.

Conservation & Restoration

The design of the MRTP will have an effect on the environment both locally and globally. Design which respects existing topography and other natural features not only is less damaging to construct, but preserves natural systems and the area’s cultural and geographic memory. On the other hand, design which minimizes unnecessary automobile travel has effects on the environment world-wide.

³ Industries characterized by highly-skilled workers in fields such as science and research, biotechnology, clean technology, information technology, disaster mitigation, education, healthcare and medicine, media production, and professional services and similar knowledge based organizations.



As is now understood, one of the major causes for carbon emissions over the last fifty years has been the way cities have been built. A purposeful emphasis on the creation of cities for automobiles at the expense of pedestrians, bicycles, and transit has increased automobile usage and associated carbon emissions. At the same time, this style of development has increased land consumption, thereby reducing available agricultural lands and increasing problems with storm water runoff. Creating the Park in an efficient, livable, and environmentally-friendly way will ensure reduced emissions.

Diversity & Balance

Mixing of uses and clustering of destinations is a way to reduce distances and make walking and bicycling more convenient. Mixing of uses at the neighborhood scale, within the $\frac{1}{4}$ mile walking radius, allows people to reach daily destinations easily by foot. Having retail and civic uses within areas of residential and employment uses makes it easy for people to do quick errands during their daily activities. Having recreational spaces nearby allows people to reach them more easily, creating situations where people can incorporate healthful activity into their daily lives.

Providing a diversity of housing is also a critical element for healthy communities. Housing types must be as diverse as the needs of the people who inhabit them and accommodate changing demographic and consumer preferences.

Another important reason for a mix of uses on the district scale is to create a jobs housing balance. A jobs housing balance not only shortens many commute trips, making it more likely that people can travel to their jobs by walking or bicycling, but it also makes transit and automobile travel more efficient. As a jobs center, it is unlikely that the Park will achieve a complete jobs housing balance. However, adding at least some housing will improve the situation, improving transportation efficiency as well as adding 24-hour activity in the Park. Having people in an area during more hours of the day makes an area safer and helps local serving businesses like restaurants, survive since they have customers in both the daytime hours and the evening hours. This activity level will make the Park a more livable and viable area.

Human & Pedestrian Scale

Human and pedestrian scale includes many aspects of a place. Among the most important factors is a diversity of land use, as discussed in the preceding section. Another



critical factor in human and pedestrian scale is walkable streets. An environment that encourages walking is imperative to the creation of a vibrant community. To be walkable, streets must be well designed. Sidewalks are a must, but the design of the road network and of the streets themselves are critical. Rather than the typical street hierarchy of cul-de-sacs, locals, collectors and arterials, the Master Plan Update builds a network of interconnected local streets and connector roads. By ensuring multiple connections and routes, connector roads avoid the difficult problem of unlivable, high traffic collectors which are too busy and too noisy to accommodate residential development.

The streets in the MRTP will be designed with a pedestrian-friendly environment as the first priority. Comfortable, walkable and bikeable streets knit neighborhoods and districts together, adding to a sense of community and facilitating transit use. Each sidewalk needs the shelter of trees, the presence of building entries and porches rather than parking lots, and a buffer of parking to protect the pedestrian corridor from moving traffic. In all cases streets are designed to slow traffic, as high speeds are unnecessary within the site. The streets in the Park have been designed to be calmed and more human in scale and character. By sizing the streets correctly and highlighting character elements that emphasize the streets' quality as much as their quantity, the Park's neighborhoods will be naturally safer for all users, including employees, residents, and their children.

Connections & Interdependence

A robust, equitable, environmentally sound transportation system accommodates multiple transportation modes. A variety of strategies can be used to achieve this, from provision of adequate pedestrian and bicycling facilities to implementation of transportation demand management strategies.

Connectivity is closely related to intermodalism and is an important tool. Well connected street networks better accommodate multiple modes. Direct routes are especially important for pedestrians, since the rate of trips made by walking is highly sensitive to distance. Connected streets also affect trip lengths for automobiles, reducing vehicle miles traveled while providing alternate routes in case of road blockages or repairs. Connectivity between modes, such as good sidewalk connections to transit stations, improves the efficiency and effectiveness of the entire system.



5. Sustainability Plan

In accordance with priority guidelines and principles to promote sustainability under section 226-108 and in response to comments from DBEDT LUC and State Office of Planning a Sustainability Plan was prepared. (See: Appendix N, "Sustainability Study") When applying these principles to the MRTP some major elements are outside the control of the master plan. For instance the Parks location across from Piilani Highway makes non motorized transportation difficult. However adding housing and commercial and retail activities to the MRTP creates a mix of activities which will create a more complete community and allow people to meet all of their needs in the area. The MRTP has the opportunity to showcase workers and residents enjoying a diversity of housing, transit connectivity and quality economic development from this community.

Conservation and Restoration

Design of the MRTP will respect the existing topography and other natural features, and is therefore less damaging to construct and preserves natural systems. The MRTP will incorporate a compact designed roadway network with bicycle and pedestrian pathways to reduce automobile use. The MRTP will use recycled water when applicable including fire control, landscaping and toilets. It is estimated that 170 million gallons of water per year could be diverted away from injection wells. Approximately 300 kilowatts of photovoltaic power is used at the MRTP with another 200 kilowatts planned. The master developer will encourage the use of as much renewable energy and distribution generation as the utility will allow. The use of drought tolerant native plants will be encouraged.

Diversity and Balance

The MRTP Master Plan provides a diversity of uses, far different than typical single-use development. The MRTP will provide residential opportunities within walking distance of commercial development to reduce commuting distances and make walking and bicycling more convenient. Residential neighborhoods will offer a diversity of housing types within a short walk of the mixed use center, and the Park's increased balance of employment and residential will help alleviate problems of commuting to work.

Human and Pedestrian Scale

The MRTP will provide a variety of activities and land uses available within a reasonable walking and bicycling distance and creates an area scaled to people, not automo-



biles. The plan proposes streets with bike lanes and sidewalks for slow automobile traffic and nearby buildings, creating a kind of outdoor room for which will be comfortable, safe and inviting for pedestrians. Pedestrian safety measures include street parking, narrow streets, traffic calming measures, and sidewalks throughout the MRTP to promote less reliance on the automobile.

Connections and Interdependence

The MRTP will be accessible from Piilani Highway via the existing Lipoa Parkway. The Park will develop an internal roadway network that will connect the MRTP to the Piilani Highway and to surrounding developments as necessary. The MRTP will also include sidewalks and bicycle pathways to improve the efficiency and effectiveness of the transit system. As the MRTP gains employment and population, transit service will become more viable as well as more essential. The Park has been planned to work with a future transit system.

G. MRTP MASTER PLAN UPDATE OVERVIEW

The concept diagram and master plan show the overall vision for the future of the MRTP (See: Figure 10, “Overall Concept Diagram”, Figure 11, “Detailed Master Plan”, and Figure 12, “Conceptual Birds-Eye Rendering”). Significant elements of the Master Plan Update land use program are summarized in Table No. 2, “Conceptual Development Program” in Appendix Q MRTP Development Code and the description that follows.

Table 2, Conceptual Development Program

| A Employment Core | | |
|--------------------------|-------------------|-------------------------------|
| | Acres | |
| Net Developable Land | 63.7 | 68.9% 74.1% |
| Parks & Open Space | 9.3 | 9.9% 10.8% |
| | 20.855 | |
| Road Rights-of-Way | <u>13.0</u> | 22.0% <u>15.2%</u> |
| | 93.808 | |
| Total Land Area | 86.0 | 100.0% |



| | | |
|---------------------------|---------|-------------|
| Employment BUA (New) | 716,000 | Square Feet |
| Employment BUA (Total) | 896,000 | Square Feet |
| Other Non-Residential BUA | 0 | Square Feet |
| Dwelling Units | 0 | |

B Knowledge Industry Expansion / Campus

| | | |
|--------------------------------------|----------------------|------------------------|
| | <u>Acres</u> | |
| Net Developable Land | 54.6 | 60.5% 62.0% |
| Parks & Open Space | 25.9 | 28.7% 29.4% |
| Road Rights-of-Way | 9.589 7.6 | 10.6% 8.6% |
| | <u>90.189</u> | |
| Total Land Area | 88.2 | 100.0% |
| | 577,882 | |
| Employment BUA (New) | <u>611,082</u> | Square Feet |
| Other Non-Residential BUA | 33,200 | Square Feet |
| Multi-Family DU | 21 | |
| DU per Acre | 9.2 | |
| Residential Acres MF | 2.3 | |

C Village Center

| | | |
|---------------------------------|-------------------|------------------------|
| | <u>Acres</u> | |
| Net Developable Land | 34.1 | 58.5% |
| Parks & Open Space | 10.4 | 17.9% |
| Road Rights-of-Way | 13.8 | 23.7% |
| Total Land Area | <u>58.3</u> | 100.0% |
| Employment BUA (New) | 67,200 | Square Feet |
| | 202,000 | |
| Other Non-Residential BUA | <u>269,200</u> | Square Feet |
| Multi-Family DU | 300 | |
| Single Family DU | 100 | |
| DU per Acre MF | 30.4 | |
| DU per Acre SF | 9.0 | |
| Residential Acres MF | 9.9 | |
| Residential Acres SF | 11.1 | |



D Makai Residential

| | <u>Acres</u> | |
|---------------------------|--------------|-------------|
| Net Developable Land | 21.0 | 53.9% |
| Parks & Open Space | 7.0 | 17.8% |
| Road Rights-of-Way | 11.0 | 28.2% |
| Total Land Area | <u>39.0</u> | 100.0% |
| Employment BUA (New) | 0 | Square Feet |
| Other Non-Residential BUA | 0 | Square Feet |
| Single Family DU | 350 | |
| Residential Acres SF | 21 | |
| DU per Acre SF | 16.6 | |

E Option Land

| | <u>Acres</u> | |
|-------------------------------------|-------------------|-------------------------------|
| Net Developable Land - Employment | 34.6 | 27.2% <u>27.9%</u> |
| Net Developable Land - Residential | 34.5 | 27.1% <u>27.8%</u> |
| <i>Net Developable Land - Total</i> | 69.1 | 54.4% <u>55.8%</u> |
| Residential Parks & Open Space | 6.3 | 4.9% <u>5.1%</u> |
| Other Parks & Open Space | 24.4 | 19.2% <u>19.7%</u> |
| | 27.236 | |
| Road Rights-of-Way | <u>24.0</u> | 21.4% <u>19.4%</u> |
| | <u>127.036</u> | |
| Total Land Area | <u>123.8</u> | 100.0% |
| Employment BUA (New) | 403,718 | Square Feet |
| Other Non-Residential BUA | 0 | Square Feet |
| Multi-Family DU | 179 | |
| Single Family DU | 300 | |
| DU per Acre MF | 30.3 | |
| DU per Acre SF | 10.5 | |
| Residential Acres MF | 5.9 | |
| Residential Acres SF | 28.6 | |

F Retention Pond



| | |
|--------------------|--------------|
| | <u>Acres</u> |
| Open Space | 5.5 |
| Road Rights-of-Way | <u>0.3</u> |
| Total Land Area | 5.8 |

SITE TOTALS

| | | |
|------------------------|---------------------|---------------|
| | <u>Acres</u> | |
| Net Developable Land | 242.5 | 60.5% |
| Parks & Open Space | 88.7 | 22.1% |
| | 82.78 | |
| Road Rights-of-Way | <u>69.8</u> | 17.4% |
| | 414.0 | |
| Total Land Area | <u>401.0</u> | 100.0% |

Note. The total MRTP land area is 410.937 acres. The 401 acre total on this page does not include land area for Lipoa Parkway makai of the Park and the portion of Ninau Street south of the MRTP boundary (which is shown on the Maser Plan). Both of these areas are roadways and do not contain development.

| | | |
|--------------------------------------|-------------------------|------------------------|
| Employment BUA (New) | 1,764,800 | Square Feet |
| Employment BUA (Total) | 1,944,800 | Square Feet |
| Other Non-Residential BUA | 235,200 | Square Feet |
| Total BUA | <u>2,180,000</u> | Square Feet |

| | | |
|------------------------------------|------------------|--------------------|
| <u>Non-Residential BUA (New)</u> | <u>2,000,000</u> | <u>Square Feet</u> |
| <u>Non-Residential BUA (Total)</u> | <u>2,180,000</u> | <u>Square Feet</u> |

Dwelling Units **1,250**



1. Employment Core

The Park's existing buildings are within the Employment Core area. This area will remain exclusively in employment uses, though incidental supportive retail uses will be allowed. The minimum lot size within the Employment Core area will be reduced to ~~one half acre~~ to accommodate a variety of commercial building typologies. The employment core currently supports approximately 400 employees within 180,000 square feet. Additional development of up to 716,000 square feet, supporting approximately 1,790 employees⁴, is planned for this area (See: Figure 13, "North Ninau Conceptual Rendering").

2. Mixed-Use Village Center

The mixed-use village center is the cultural and civic heart of the MRTP. This 58-acre site includes a mix of housing, office, civic, live-work, park, and retail uses within a compact, mixed-use setting. The Mixed-Use Village Center may accommodate up to 269,000 square feet of commercial and employment related uses together with 400 higher density multi-family units. The Center is intended to be a flexible area to contain space for incubating new businesses as well as supportive retail, civic uses, open space, and residential space. The Village Center includes a mauka-makai village green that links the two retail nodes together. The Center will be used for recreation, civic and cultural activities – possibly serving as a site for a farmer and crafters market or other similar venues. The Center is fronted by a mix of activity generating land uses including retail uses; flex space buildings, multi-family buildings with ground floor retail along with two schools. Townhomes and mixed-use multi-family line Ho'okena Street, creating a small main street. This will be the heart of the area's retail uses, providing local service uses like cafes and business services. A mauka node at the intersection of the Park and Ninau Street will provide retail space later on as the site develops further, including a possible space for a business hotel with small conference facilities to serve the Park's employers. Transit stops in these areas will connect Park workers and residents to the larger region (See: Figure 14, "Village Center" and Figure 15a-b, Village Center Conceptual Renderings").

⁴ Assumes one employee per 400 square feet of commercial space.



3. Single and Multi-Family Residential

The residential area *makai* along Ho'okena Street on the way to Pi'ilani Highway has high amenity value, with views of the golf course to the south and Waipuilani Gulch to the north. Houses also line a local park in the center of the area, with traffic on Ho'okena Street traveling around the edges. A connection to the planned Kihei High School on the north side of the gulch allows students to commute to school by foot without having to walk along Pi'ilani Highway. (See: Figure 40, "Conceptual MRTP/High School Connection") Mauka of the Village Center is another residential area with dramatic views of Haleakala, the Pacific Ocean and West Maui mountains. Tree lined streets and a network of pocket and neighborhood parks will help define the structure and character of neighborhoods and link residents with the neighboring Mixed-Use Village and employment areas.

The mauka and makai residential units are proposed on approximately 55.5 net developable acres within easy walking distance of schools, retail, services, and jobs. The "makai" residential area is designed to accommodate up to 350 higher density small-lot residential units at approximately 14 units per acre. The mauka residential area is designed to accommodate up to 479 single- and multi-family dwelling units at approximately 30 dwelling units per acre for the multi-family and 11 units for the single-family along with parks and open space (See: Figure 16, "Residential Neighborhood"). With a majority of homes within a 5-minute walk of the Village Center, many daily needs are within a short and comfortable walk.

4. Knowledge Based Employment

Major knowledge-based employment zones are located south of Lipoa Parkway and mauka of the employment core. This area is intended to accommodate both large and small-scale users. The Master Plan Update sets aside areas of sufficient size to accommodate a full range of potential users; these users may include large institutions desiring a corporate or educational campus environment to small start-ups and established mid-size businesses. The Knowledge Industry Expansion areas can accommodate up to 982,000 square feet of employment, 33,000 square feet of accessory commercial/retail, and 21 dwelling units (See: Figure 17, "Knowledge Industry Expansion Campus").

Maui Research & Technology Park

OVERALL CONCEPT DIAGRAM

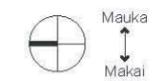


LEGEND

- Project Boundary
- Mixed-Use
- Knowledge Industry
- Knowledge Industry Expansion
- Residential & Expansion
- Open Space / Parks

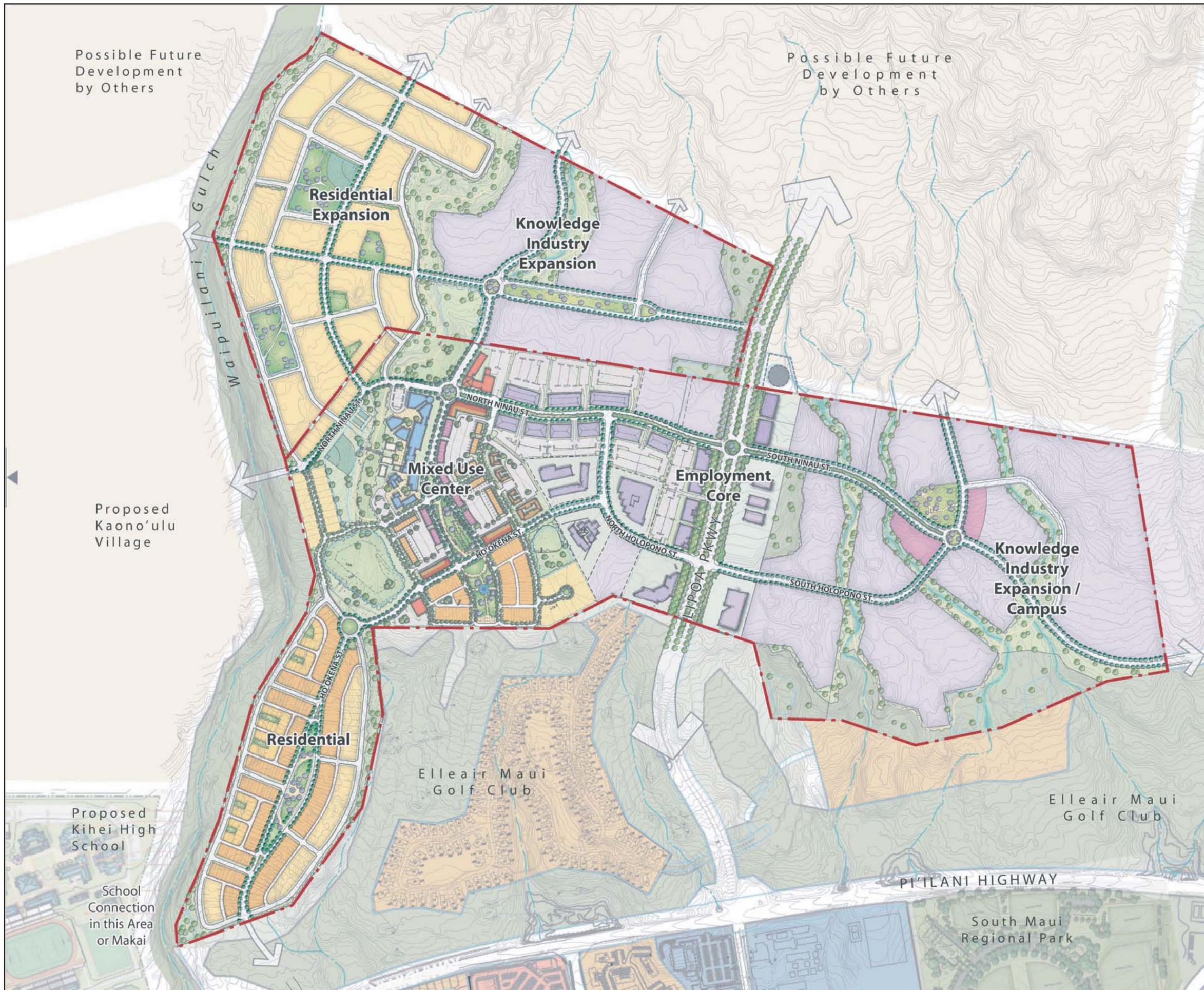
FIGURE NO. 10
OVERALL CONCEPT DIAGRAM
MAUI RESEARCH & TECHNOLOGY PARK
 Kihei, Maui, Hawaii

March 20, 2012



Maui Research & Technology Park

MASTER PLAN



LEGEND

- - - Project Boundary
- Retail
- Knowledge Industry
- Live-Work / Flex Space
- Multi-Family
- Townhomes
- Single Family
- Civic / School
- Park
- Open Space

FIGURE NO. 11
CONCEPTUAL MASTER PLAN
MAUI RESEARCH & TECHNOLOGY PARK
 Kihei, Maui, Hawaii

March 20, 2012

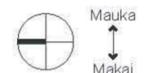




FIGURE NO. 12
CONCEPTUAL BIRDS-EYE RENDERING



FIGURE 13
NORTH NINAU CONCEPT RENDERING



FIGURE 14
VILLAGE CENTER



FIGURE NO. 14a
VILLAGE CENTER ROUNDABOUT



FIGURE 15b
VILLAGE CENTER COMMERCIAL



FIGURE 16
RESIDENTIAL NEIGHBORHOOD CONCEPT



5. Open Space Network & Parks

The Park will provide multiple types of open spaces and parks. Existing gulches, outside the Park boundary, provide valuable connections mauka/makai, and could form the trunk routes of a trail network connecting to the rest of Kihei. Neighborhood parks serve as a community focal point and places for exercise, sports, relaxation, activities such as community gardening, and civic and cultural events. The Master Plan Update incorporates approximately ~~47~~ 48 acres of neighborhood parks and open space of varying sizes within the Village Center and the mauka and makai residential neighborhoods. Within the Village Center a park is designed to follow the topography from Ninau Street toward the golf course over the course of several blocks.

Trunk open spaces contain some of the site's more dramatic terrain, allowing the plan to respect the existing topography while creating another set of linkages throughout the site. In addition, street greens continue the Park's beautiful landscape treatments and serve to link the Park together. On Lipoa Parkway, continuation of the existing 60-foot setback creates a wide greensward lined with lush landscaping. The north-south connector greenway along North and South Ninau Street connects the site laterally, linking the mixed-use center with the employment area center while linking together other open spaces as well. Other open space areas throughout the project site serve to provide visual relief and green space while also serving as detention basins to capture and filter urban runoff (See: Figure 18, "Village Center Park" and Figure 19, "Open Space Plan").

6. Civic Uses

The Master Plan sets aside two school / civic sites within the Mixed-Use Center along the trunk open space spine and the public park blocks. It is envisioned that the school(s) will be elementary and/or intermediate and each would be within convenient walking and biking distance of the neighboring residential neighborhoods and the Kihei High School. The Civic uses will create an area of architecturally symbolic buildings intermixed with green open space and landscape planting that will draw life and energy into the community. The Civic spaces, together with the parks, will serve as gathering places for residents to meet and socialize, recreate, be entertained, and to discuss the affairs of the community.



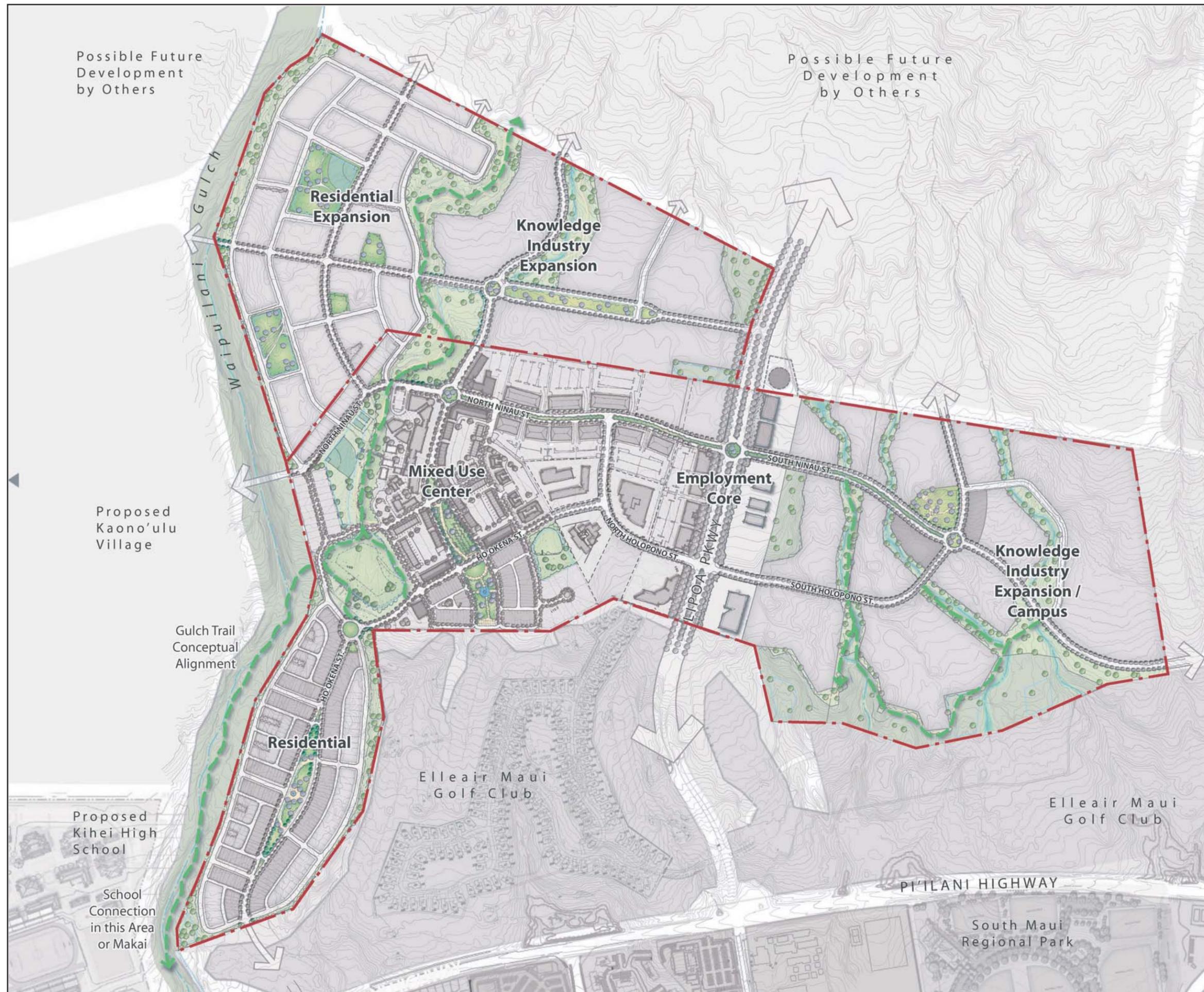
FIGURE 17
KNOWLEDGE INDUSTRY
EMPLOYMENT CAMPUS CONCEPT



FIGURE 18
VILLAGE PARK CONCEPT

Maui Research & Technology Park

OPEN SPACE PLAN



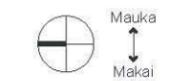
LEGEND

- Neighborhood Parks
- Street Greens
- Trunk Open Space
- Gulch
- Pedestrian / Bicycle Path

FIGURE NO. 19
OPEN SPACE PLAN

MAUI RESEARCH & TECHNOLOGY PARK
Kihei, Maui, Hawaii

March 20, 2012





7. Circulation and Roadways

The Master Plan Update establishes a hierarchy of streets that together create an efficient and comfortable circulation network for motorized and non-motorized transportation. All roads in the ~~subdivision~~ MRTP will be required to connect to other roads at each end to more efficiently distribute traffic, reduce bottlenecks, and minimize the need for large multi-lane facilities. The width and number of vehicle lanes will be minimized where possible to encourage comfortable pedestrian crossings. All streets within the Park will incorporate bicycle and pedestrian facilities, traffic calming, and street tree planting.

Ingress and egress from the site will be from Piilani Highway at Lipoa Street, Piilani Highway at the permitted access point near East Waipuilani Road and at Piilani Highway near the old Welakahao Road intersection (See: Figure 20, "Circulation Plan"; Figure 21, "Pedestrian and Bicycle Plan"; and Figure 22, "Transit Circulation Plan").

8. Water System

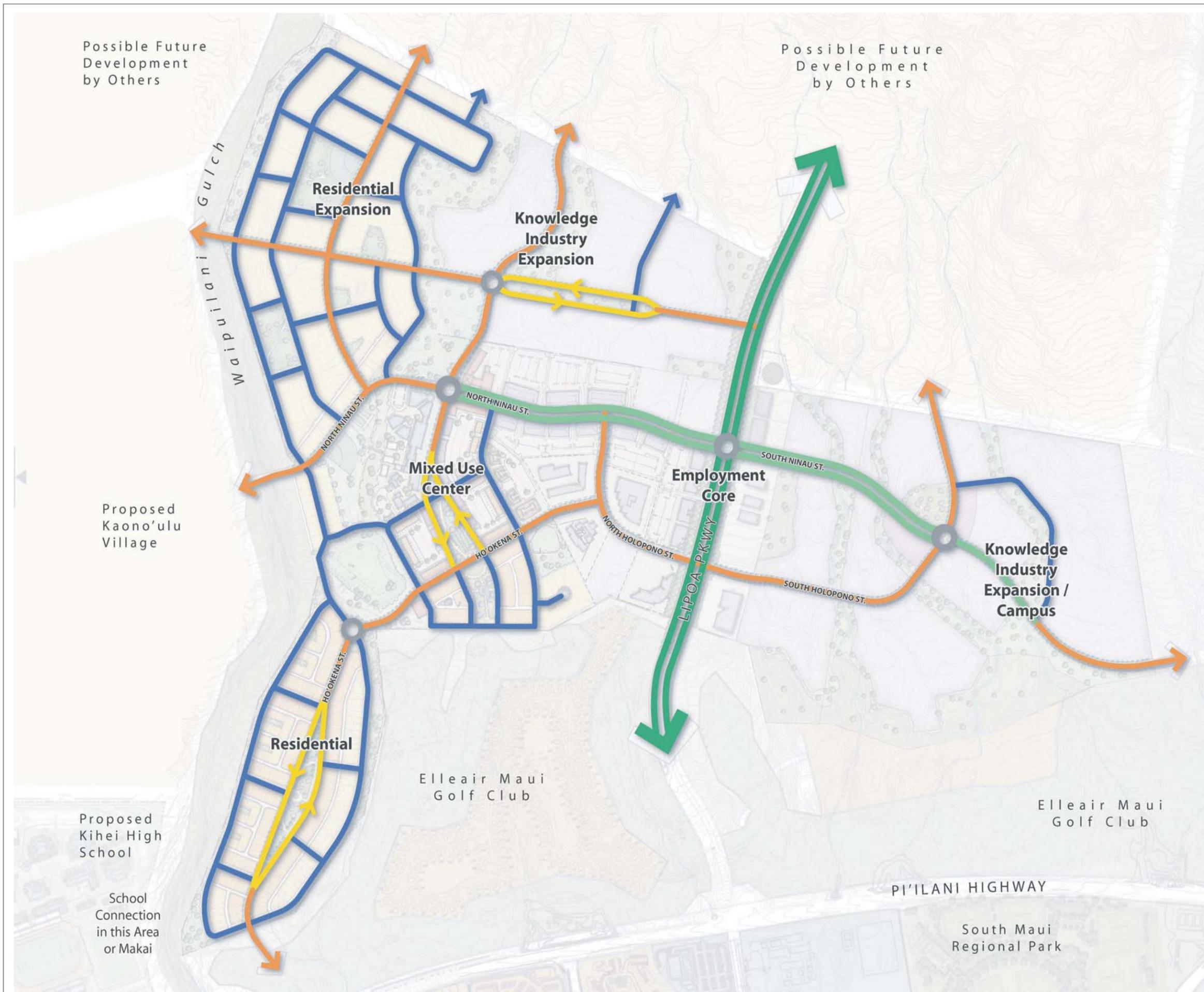
The MRTP currently receives its ~~potable~~ drinking water from the County of Maui, Department of Water Supply. The Park's ~~non-potable~~ non-drinking water is supplied by the Kihei Wastewater Reclamation Facility (KWWRF) R-1 treatment plant. Maui R&T Partners, LLC desires to continue to source its drinking and non-drinking water from these two sources. However, because current County policy does not allow for the Department of Water Supply to commit to providing drinking water for future subdivisions, the Applicant will develop and treat on-site brackish well water for ~~potable~~ drinking water and ~~non-potable~~ non-drinking water use, as demand warrants.

9. Wastewater System

The design average wastewater flow from the MRTP at build-out is expected to be approximately 0.60 mgd. This wastewater will be transmitted via gravity sewerlines, force mains and pump stations to the KWWRF for treatment. Up to seventy percent of the treated wastewater will be treated to R-1 quality where it can be recycled for landscape irrigation and other ~~non-potable~~ non-drinking water uses.

Maui Research & Technology Park

CIRCULATION PLAN



LEGEND

- (A3) Lipoa Parkway
- (B1) North - South Greenway
- (B2) South Ninau Bicycle Lane
- (C) Connector Street
- (D) Split Connector at Open Space
- (E) Local Street
- Traffic Circle

FIGURE NO. 20
CIRCULATION PLAN

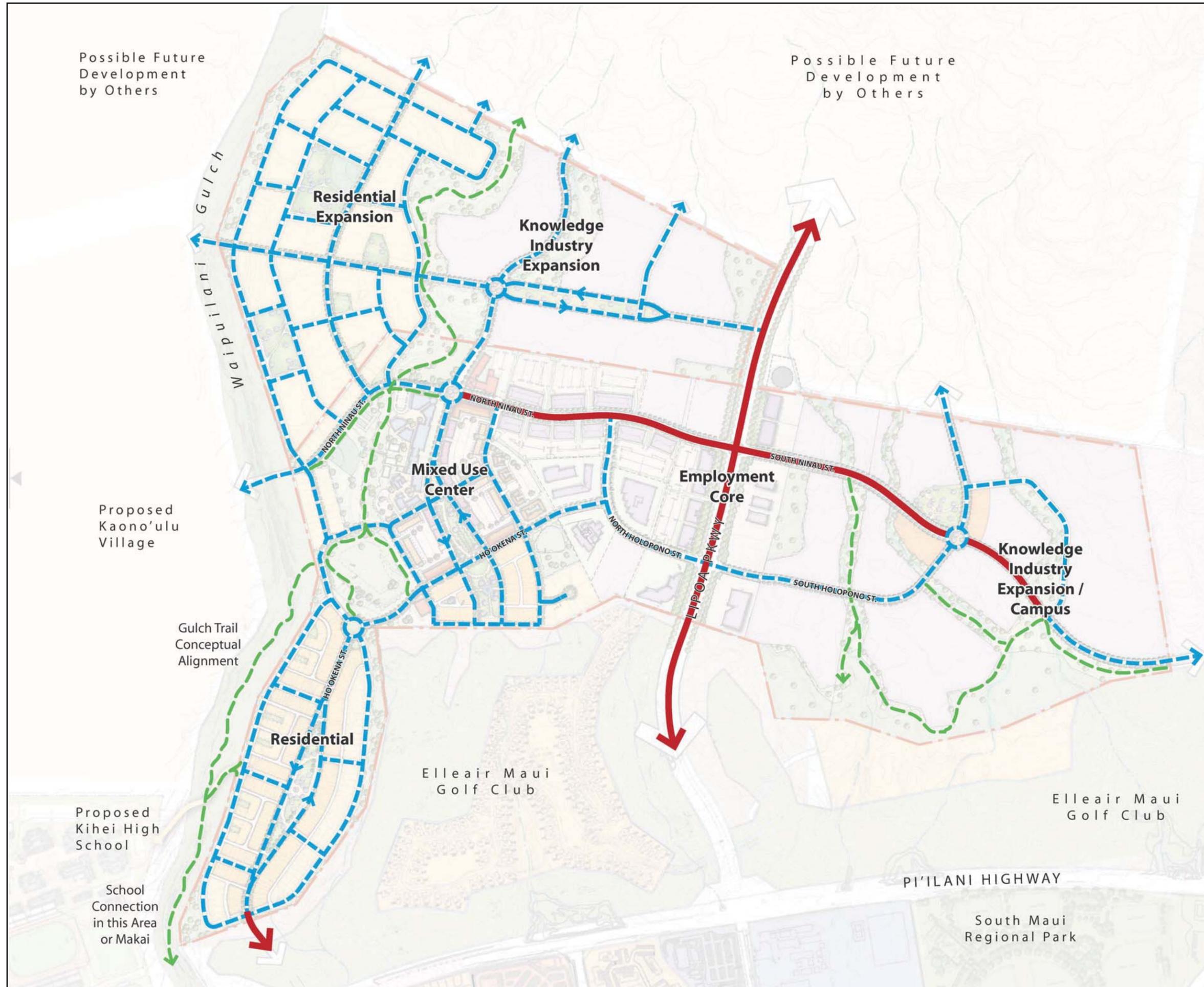
MAUI RESEARCH & TECHNOLOGY PARK
Kihei, Maui, Hawaii

November 10, 2012



Maui Research & Technology Park

PEDESTRIAN AND BICYCLE CIRCULATION

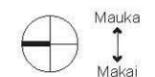


LEGEND

- Streets with Sidewalks and Dedicated Bicycle Lanes
- - - Streets with Sidewalks, In-Street Bicycles
- - - Pedestrian / Bicycle Paths in Open Space

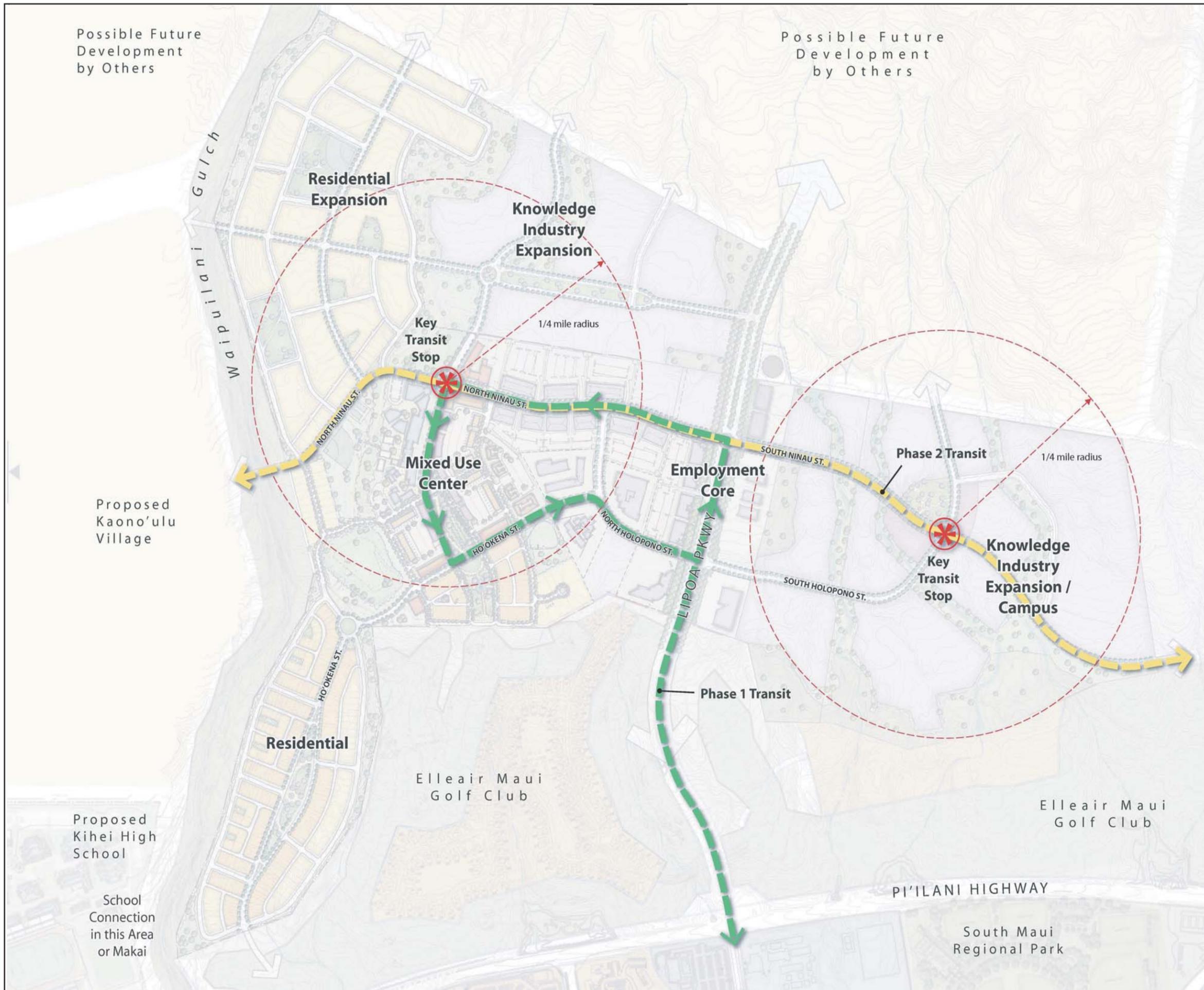
FIGURE NO. 21
PEDESTRIAN & BICYCLE PLAN
MAUI RESEARCH & TECHNOLOGY PARK
 Kihei, Maui, Hawaii

March 20, 2012



Maui Research & Technology Park

TRANSIT CIRCULATION

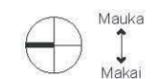


LEGEND

- Phase 1 Transit
- Phase 2 Transit

FIGURE NO. 22
TRANSIT CIRCULATION PLAN
MAUI RESEARCH & TECHNOLOGY PARK
 Kihei, Maui, Hawaii

March 20, 2012





10. Off-site roadway improvements

The gradual build-out of the Master Plan will increase traffic to and from the project site. As conditions warrant, off-site roadway improvements will be made to mitigate the impact caused by development of the MRTP. While regional growth independent of the MRTP will produce the majority of the impact to the region’s roadways, MRTP will be an active partner in working with area developers, the State and County to ensure that regional roadways operate at an acceptable levels-of-service.

H. DEVELOPMENT PHASING

The implementation of the Master Plan Update will be over the course of years and as market conditions warrant. It is anticipated that all of the necessary entitlements to fully implement the Plan will be obtained by early 2014. In the meantime, development will continue as current County ordinances prescribe and as demand arises.

In response to comments from DBEDT LUC, an incremental development plan with on-site and offsite construction cost estimates was prepared. Cost estimates differentiate between the development planned within the Petition Area and the overall technology park. See: Appendix P “Incremental Development Plan”. The Master Plan Update will be implemented in two phases; with key infrastructure improvements tied to the phase of development and as the improvements are warranted. Figure 23, “Development Phasing Plan”, identifies the phases, and sub-phases of the implementation program. Table No. 3, “Development Program Phasing”, identifies the development program with a preliminary list of off-site improvement requirements.

Table 3, Development Program Phasing

| PHASE ONE | | |
|----------------------|-----------------------------|----------------------------------|
| | Acres | |
| Net Developable Land | 118.8 | 60.3% <u>62.8%</u> |
| Parks & Open Space | 32.1 <u>32.2</u> | 16.2% <u>17.2%</u> |

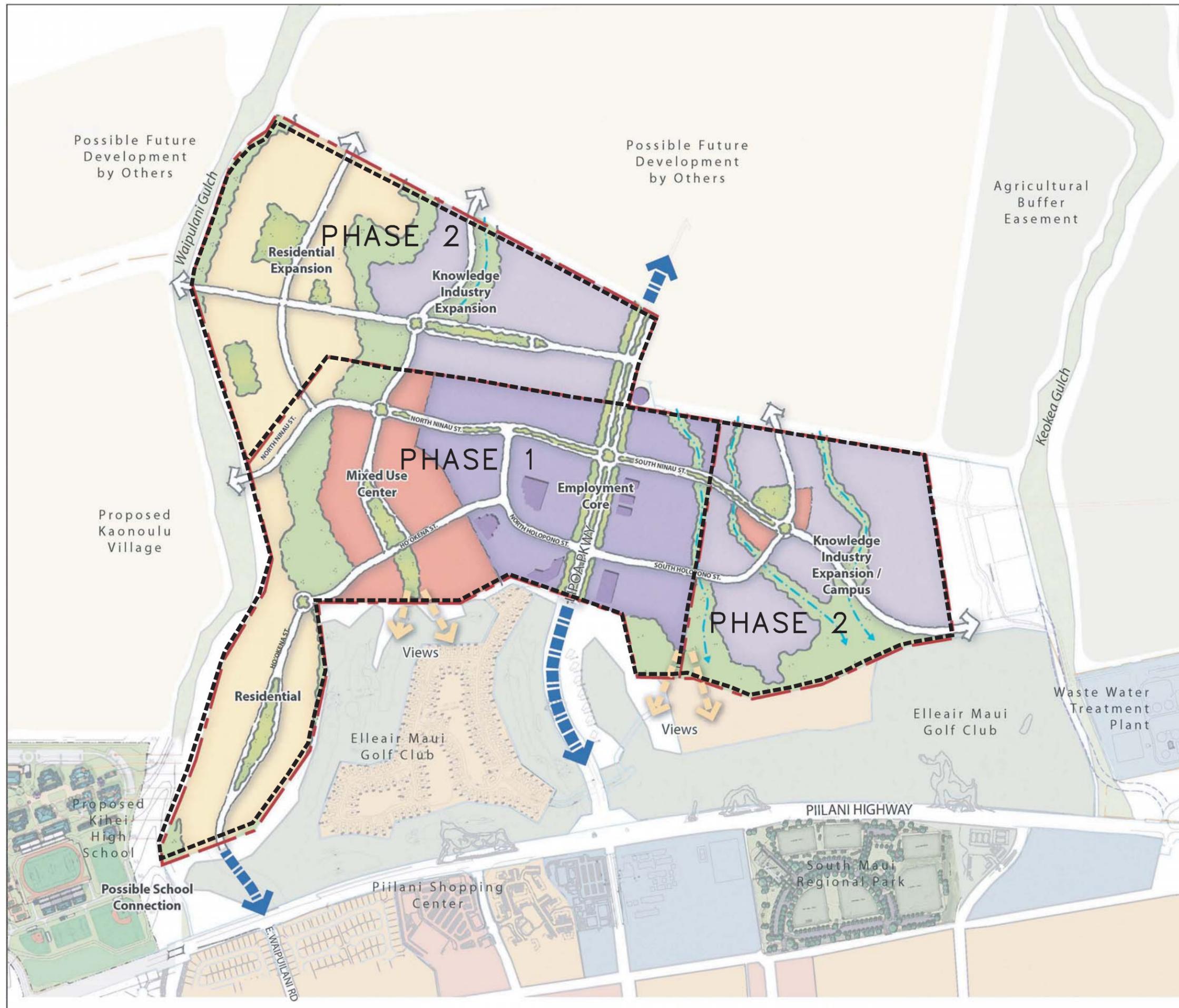
Maui Research & Technology Park



| | | |
|---------------------------|-------------------------------|------------------------------|
| | | <u>23.4%</u> |
| Road Rights-of-Way | 46.055 <u>38.1</u> | <u>20%</u> |
| | 196.96 | |
| Total Land Area | <u>189.1</u> | 100.0% |
| Employment BUA (New) | 783,200 | Square Feet |
| Employment BUA (Total) | 963,200 | Square Feet |
| Other Non-Residential BUA | <u>202,000</u> | Square Feet |
| Total BUA | 1,165,200 | Square Feet |
| Dwelling Units | 750 | |
| PHASE TWO | | |
| | <u>Acres</u> | |
| Net Developable Land | 123.7 | <u>57.0%</u> <u>58.4%</u> |
| Parks & Open Space | 56.7 <u>56.6</u> | <u>26.1%</u> <u>26.7%</u> |
| Road Rights-of-Way | 36.8 <u>31.6</u> | <u>17.0%</u> <u>14.9%</u> |
| | 217.2 | |
| Total Land Area | <u>211.9</u> | 100.0% |
| Employment BUA (New) | 981,600 | Square Feet |
| Employment BUA (Total) | 981,600 | Square Feet |
| Other Non-Residential BUA | <u>33,200</u> | Square Feet |
| Total BUA | 1,014,800 | Square Feet |
| Dwelling Units | 500 | |

Maui Research & Technology Park

OVERALL CONCEPT DIAGRAM



LEGEND

- Project Boundary
- Mixed-Use
- Knowledge Industry
- Knowledge Industry Expansion
- Residential & Expansion
- Open Space / Parks

PHASE I
Completion anticipated in 2024
PHASE II
Completion anticipated in 2034

FIGURE NO. 23
DEVELOPMENT PHASING PLAN
MAUI RESEARCH & TECHNOLOGY PARK
Kihei, Maui, Hawaii

March 20, 2012





The total cost estimate for off-site and onsite infrastructure improvements for increment 1 is approximately 77.5 million dollars and increment 2 is approximately 85.3 million dollars, totaling over 162.8 million dollars in construction cost for increments 1 and 2. A full detailed cost summary is in See: Appendix P “Incremental Development Plan”.

I. ALTERNATIVES

Under HAR Title 11, DOH, Chapter 200, EIS Rules, Section 11-200-17(F), a ~~Draft~~ Final EIS must contain a section discussing alternatives that could attain the project objectives, regardless of cost, in sufficient detail to explain why the specific alternative was rejected. Alternatives to the MRTP Master Plan Update, along with reasons why each alternative was rejected, are described below.

MRTP Master Plan Update Objectives - Objectives of the Master Plan Update are rooted in the desire of Maui R&T Partners, LLC to transform the current single-use large lot research and technology campus into an integrated and vibrant mixed-use community focused around a regional high-technology employment base. The Master Plan Update will also foster preservation of natural and cultural resources while contributing to Maui’s economic diversity and social fabric.

The objectives of the Master Plan Update are to:

- Increase knowledge based employment in the Park;
- Create a “complete community” with a diversity of housing, retail, and civic uses to support the Park’s employees;
- Provide greater diversity and flexibility of commercial space to attract both very small and large-scale knowledge-based employers;
- Reduce automobile dependence;
- Create the opportunity for healthier and more active lifestyles; and
- Reduce the project’s energy demand through conservation and energy efficient design.

Five (5) alternatives to the Master Plan Update were considered. These alternatives are discussed below.



1. No Action Alternative

Under the no action alternative, existing entitlements would remain and Chapter 19.33 of the Maui County Code (MCC), Kihei Research and Technology Park District, would continue to determine development standards. The Project site would remain a single-use large lot research and technology park and the purpose and intent of the MRTTP would continue to be stymied by outdated and overly-restrictive zoning and development standards. Under this alternative, desired changes to attract knowledge based industries, such as offering support services and amenities, would not be implemented. The existing slow rate of development activity would likely continue and the Park's full potential as the intended "third leg" of the Maui Island economy would not be realized.

Under the no action alternative, there would be no master-planned community utilizing "smart growth" and "neo-traditional" town planning principles, such as diverse residential opportunities, village mixed uses, on-site recreational amenities and integrated bicycle and pedestrian networks. There would continue to be a lack of workforce housing, support services and amenities within walking and biking distance of the existing Park industries.

Under the no action alternative, the following project benefits could not be realized at the site:

- ***Diverse housing opportunities.*** The project will bring to market 1,250 residential units which are to be developed as a mix of single-family, ~~townhomes~~ and multi-family. Pricing for residential units is expected to be largely affordable for employees of the Park and other Maui Island residents.
- ***Opportunity to live within walking/biking distance of jobs, parks, shopping and schools.*** At build-out the Project will create approximately 5,219 jobs on-site while providing 1,250 residential units. The proposed Village Center and Employment Core is within a short 5-minute walk of most residential neighborhoods, while the more outlying employment expansion areas are within a short 5-minute bicycle ride. The project also incorporates schools, parks, and commercial/retail uses to create a complete and pedestrian-oriented community.
- ***Parks and open space.*** The Master Plan proposes approximately ~~47~~ 88.7 acres of parks and open space throughout the project site. These areas will be ac-



cessible to the public in a manner that is not possible in their currently undeveloped condition.

The no action alternative would also deprive the State, County and general public of the significant economic benefits associated with the MRTP Master Plan Update, including an estimated:

- \$1.39 billion in direct capital investment in the Maui economy during the build-out period;
- 63,507 “worker years” of direct on-site employment and \$2.7 billion in total wages over a 19 year absorption period;
- 5,878 permanent jobs after build-out with an annual payroll of about \$217 million.
- \$6.2 billion in taxable/sales revenue, averaging \$324.7 million per year.
- \$7.8 billion base economic impact during build-out and \$903.9 million annually upon stabilization.
- \$466.3 million in net tax revenue (profit) during development and \$57.3 million per year to the State of Hawaii on an annualized basis thereafter.
- \$25.3 million in net tax revenue (profit) during the build-out period and \$21.5 million in annual net tax revenue (profit) to the County of Maui after the build-out period.

Potential benefits of the no action alternative would include: 1) no short-term construction-related impacts (such as construction noise, construction equipment exhaust emissions and fugitive dust); 2) avoidance of additional infrastructure demands (drinking-water, wastewater flows, and solid waste disposal); 3) no increased MRTP traffic impacts and associated infrastructure costs; and 4) less demand upon the region’s coastal and inland parks and recreation facilities. The no action alternative would not add to regional population increases, or require any public services, such as parks and schools, to accommodate an increased population in the area.

For the following reasons, the no action alternative was rejected:

- Does not meet the objectives of the MRTP Master Plan Update;
- Would deny the entire region of many substantive benefits that would be implemented under the Master Plan; and



- Would not provide the State, County and general public the significant economic benefits associated with the implementation of the Master Plan Update.

In summary, the benefits associated with the no action alternative are far outweighed by the benefits to the community that the Project would bring.

2. No Residential Uses Alternative

An alternative to the current Master Plan Update could be amending Chapter 19.33 to allow more flexible zoning and development standards, but not allowing residential uses in the Park. This alternative would broaden the list of high technology uses to include knowledge-based industries and allow smaller lot sizes. Under this alternative, commercial uses, or support services, would also be permitted within the Park.

Research of successful employment centers in other locations has shown that knowledge based industries are attracted to locations offering a mix of uses and workforce housing opportunities. Residential development is an important component of the mixed use, complete community concept, and the Park may not be as attractive to future investors without the diverse range of housing options proposed. Under this alternative, no affordable housing will be provided within walking and biking distance of employment, thus not utilizing “smart growth” and “neo-traditional” town principles. With no residential component, there will be less construction phase employment associated with the development of the Park, providing fewer economic benefits to the region and Maui at large. Additionally, there could be less long-term knowledge industry employment should the Park be less successful than it would otherwise be with the residential component.

Positive impacts of the no residential uses alternative would include less traffic, wastewater and solid waste generation as a result of no residential development and less knowledge industry development. Without residential development there would be reduced demand for police, fire, electrical and drinking water services and roadway infrastructure. Broadening the list of high technology uses and commercial uses and allowing smaller lot sizes would attract “start-up” companies that often have a limited budget and require less space. However, without the provision of a mix of workforce housing options the Park will be less attractive to future investors, thus hampering the success of the Park.



Because the no residential uses alternative does not promote “smart growth”, exacerbates automobile dependence, and hinders the long-term viability of the Park, this alternative was rejected.

3. No Entitlement of Expansion Lands Alternative

Another possible alternative could be to allow development of existing entitled lands, but do not entitle expansion lands to the south and east. This alternative would involve developing State Urban lands and leaving the remaining lands in the State Agricultural district.

This alternative would not utilize all the available land within the urban growth boundary of the Maui County General Plan. All 411 acres of the Park are within the urban growth boundary; however the no entitlement of expansion lands alternative would only utilize approximately 179 acres or 45% of these lands. Under this alternative future larger uses would be required to undertake the lengthy and expensive entitlement and permitting processes individually. This alternative would limit the flexibility of the Park to accommodate larger campus type uses by creating unnecessary entitlement costs and permitting delays for these types of projects. This would weaken the financial viability of the Park by inhibiting the Park’s ability to rapidly capture market opportunities as they arise. Additionally, this alternative would stymie the overall purpose and intent of the master plan to develop a third leg of the Maui economy by creating unnecessary barriers to knowledge industry development.

Positive impacts of this alternative are that it would still allow for a broader base of knowledge industry uses, residential units and smaller commercial lot sizes within urban designated lands. Under this alternative, the Park would initially have a smaller “urban footprint”, thus lessening construction-phase impact, generating less wastewater and solid waste, and lessening demands on infrastructure systems and public facilities. However, the State Agricultural district lands could be entitled for urban uses in the future.

Because the no entitlement of expansion lands alternative weakens the financial viability of the Park and creates unnecessary barriers to knowledge industry development, this alternative was rejected.



4. Commercial Mixed-Use Alternative

Another possible alternative could be to abandon the high-tech/knowledge industry focus in favor of a commercial mixed-use development. This alternative would broaden the list of permitted uses to include all commercial and industrial uses along with residential use without identifying the high-tech/knowledge industry as the backbone of the development.

The commercial mixed-use alternative would not be consistent with the purpose and intent of MCC Chapter 19.33, Kihei Research and Technology Park District which is “to provide for the establishment of a research and technology park district”. This alternative would not be consistent with the Kihei Makena Community Plan which establishes that the site should be used for research and technology development. Additionally, it would not be consistent with the objectives of the Master Plan Update.

This alternative could potentially include big box stores and other types of land and parking intensive commercial uses. With the provision of commercial and industrial uses under this alternative, employment will be generated; however it is likely that the development will attract lower paying jobs than if the Park maintained its high-tech/knowledge industry focus. Furthermore, this alternative would not facilitate the County’s desire for the Park to serve as a means for economic diversification.

Positive impacts of the commercial mixed-use alternative include that it could have the potential to attract more businesses to the MRTP. The Park could become a new commercial center for the Kihei region and generate employment opportunities. This alternative creates the opportunity for a master planned project using “smart growth” and “neo traditional” town planning principles to be developed in South Maui.

Despite these potential positive impacts, this alternative is rejected because it is not consistent with:

- MCC Chapter 19.33, Kihei Research and Technology Park District;
- The Kihei Makena Community Plan; and
- The objectives of the Master Plan Update.



5. Less Commercial and Residential Density

The final alternative considered is the less commercial and residential density alternative. This alternative would reduce the project density by increasing the average minimum lot size for residential units to approximately 7,500 square feet.

Under this alternative, residential units would occupy a significantly greater percentage of the site (i.e. approximately 200 acres - 50% of site as compared to 19.6% of site under the preferred alternative) which would crowd out the employment generating knowledge industry uses. Under such a scenario, only approximately 36.5 acres, or just 426,000 square feet of building area, would be available for employment, civic and commercial uses. With larger lot sizes housing would be less affordable and diverse; thereby not accommodating the full needs of the Park and surrounding community. This alternative would promote a sprawl type of development pattern which is not consistent with “smart growth” and is not generally supported by the ~~draft~~ Maui Island Plan.

Positive impacts of this alternative would be that the decreased residential/commercial area would generate less traffic, wastewater and solid waste and also generate less demand for drinking water, electricity and public facilities. This alternative would also generate less short-term construction-related impacts (such as construction noise, construction equipment exhaust emissions and fugitive dust).

Regardless of the potential positive impacts of the less commercial and residential density alternative, it is rejected because it does not promote “smart growth” and affordable housing and it would crowd out the employment generating knowledge industry uses, thus threatening the long-term viability of the Park.

J. ENTITLEMENTS AND APPROVALS

1. State Land Use District Boundary Amendment (DBA)

The proposed Master Plan Update will require a State Land Use District Boundary Amendment in order to bring ~~the entire 401 acres~~ portions of the Park site into the *Urban* district, as outlying portions remain classified as *Agricultural*. The outlying *Agricultural*



tural portions are identified as Tax Map Parcels (2) 2-2-024:16 and 17 and a portion of (2) 2-2-002:54 total 253.05 acres and are subject to the DBA request. The DBA is subject to approval by the State Land Use Commission. See: Figure 24, "State Land Use Map".

2. Community Plan Amendment (CPA)

The General Plan of the County of Maui includes the following documents: 1) County-wide Policy Plan, 2) Maui Island Plan, and 3) Community Plans. The proposed project site is within the ~~Draft~~ Maui Island Plan's Urban Growth Boundary, which is required for the proposed project to occur (See: Figure 25, "~~Draft~~ Maui Island Plan Urban Growth Boundary"). However, updating of the Master Plan will require amending the Kihei-Makena Community Plan from Project District and Public-Quasi Public to the proposed new "Maui Research and Technology Park District", a district that better aligns with the Master Plan vision. ~~and anticipated changes to Maui County Code (MCC) Title 19.33 "Kihei Research & Technology Park District".~~ The CPA will require approval by the Maui County Council. See: Figure 26, "Kihei-Makena Community Plan Map". The Parcels requiring a CPA are identified as Tax Map Key Parcels (2) 2-2-024:02-9, 14-18, 32, 34, 36-46 and a portion of (2) 2-2-002:54, totaling 406.009 acres, and are subject to the CPA request. The CPA is subject to approval by the Maui County Council. (See: Figure 26, "Kihei-Makena Community Plan Map" and Appendix R "Kihei-Makena Community Plan Maui Research and Technology Park District").

3. Change in Zoning (CIZ)

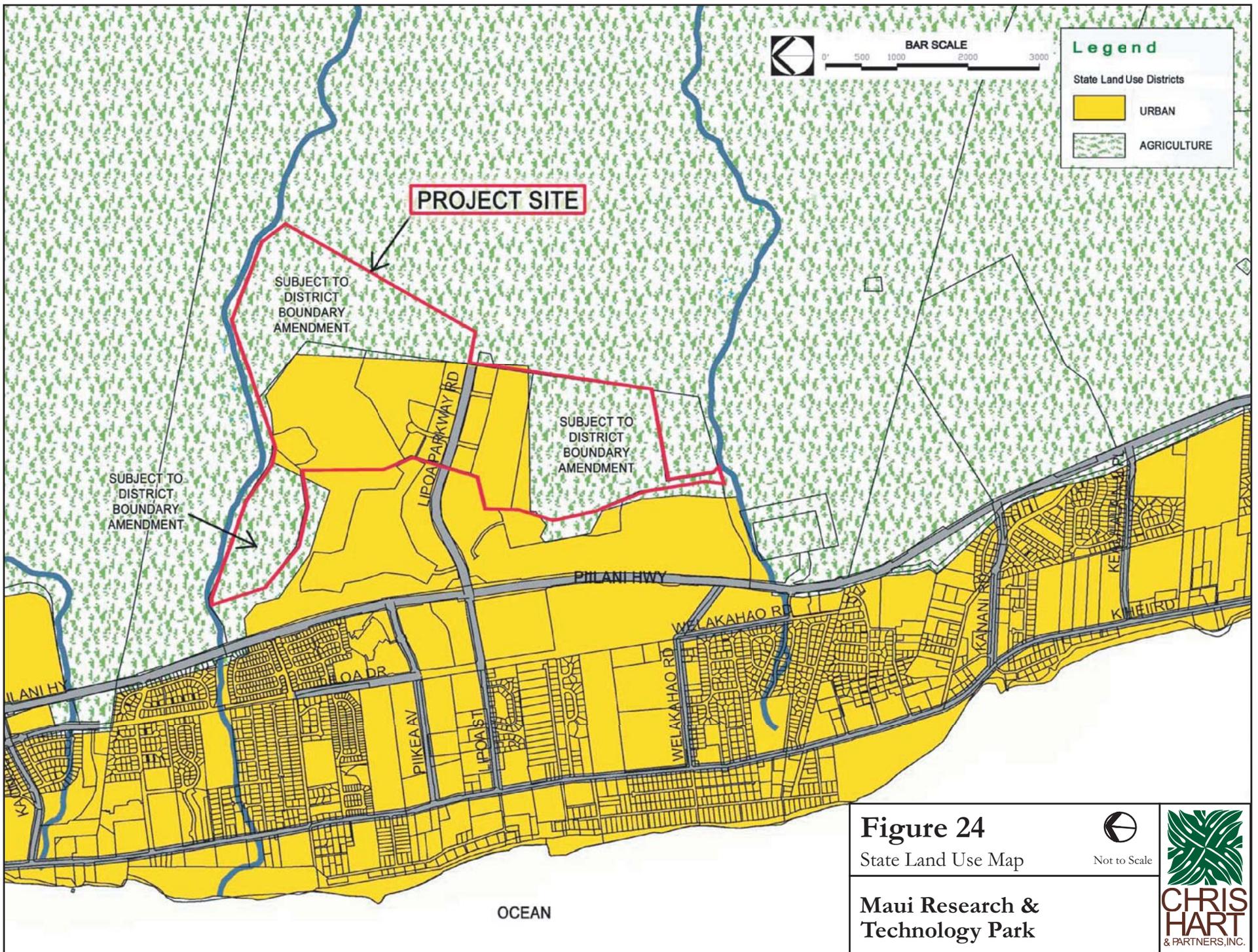
~~The Master Plan Update will similarly require a Change in County Zoning in order to bring the entire Park site into the Research and Technology Park district, whereas portions are currently zoned Agricultural. As above, changes will also be sought to the language of Chapter 19.33, MCC, to allow for a more diversified development that is appropriate as represented in the Master Plan Update. The Master Plan Update will require a Change in Zoning in order to bring the MRTP Parcels into the proposed new "Maui Research and Technology Park District" (Chapter 19.33A, MCC). The proposed new "Maui Research and Technology Park District" (Chapter 19.33A, MCC) builds on the existing language of Chapter 19.33, MCC, to allow for a more diversified development that comports with the vision of the Master Plan Update to facilitate the creation of an integrated and vibrant mixed-use community focused around a regional knowledge-based industry employment base. The existing Chapter 19.33 and the proposed new 19.33A will be~~



two distinct zoning districts. The CIZ request will require approval by the Maui County Council. The Parcels requiring a CIZ are identified as Tax Map Key Parcels (2) 2-2-024:02-9, 14-18, 32, 34, 36-46 and a portion of (2) 2-2-002:54, totaling 406.009 acres, and are subject to the CIZ request. The CIZ is subject to approval by the Maui County Council. (See: Figure 27, “Maui County Zoning Map” and Appendix O’ Draft Zoning Ordinance Chapter 19.33A, MCC”.)

4. Environmental Impact Statement (EIS)

The Community Plan Amendment is a “trigger” action for Hawaii’s Environmental Impact Statement law, Chapter 343, Hawaii Revised Statutes. Additionally, off-site infrastructure work affecting State and County rights-of-way are anticipated which may also act as triggers. Therefore, the applicant ~~has~~ prepared ~~this~~ an Environmental Impact Statement (EIS) to examine potential impacts and mitigation measures resulting from implementation of the Master Plan Update. The State Land Use Commission will serve as the Approving Agency has determined that the project may have significant effect and that an EIS is required. Therefore an Environmental Impacts Statement ~~Preparation Notice (EISPN)~~ (EIS) was submitted to the Office of Environmental Quality Control (OEQC) and was published in the Environmental Notice on ~~August 8, 2010~~ June 23, 2012. The public had 45 days from that date to request to become a consulted party and provide written comment upon the proposed action.



Legend

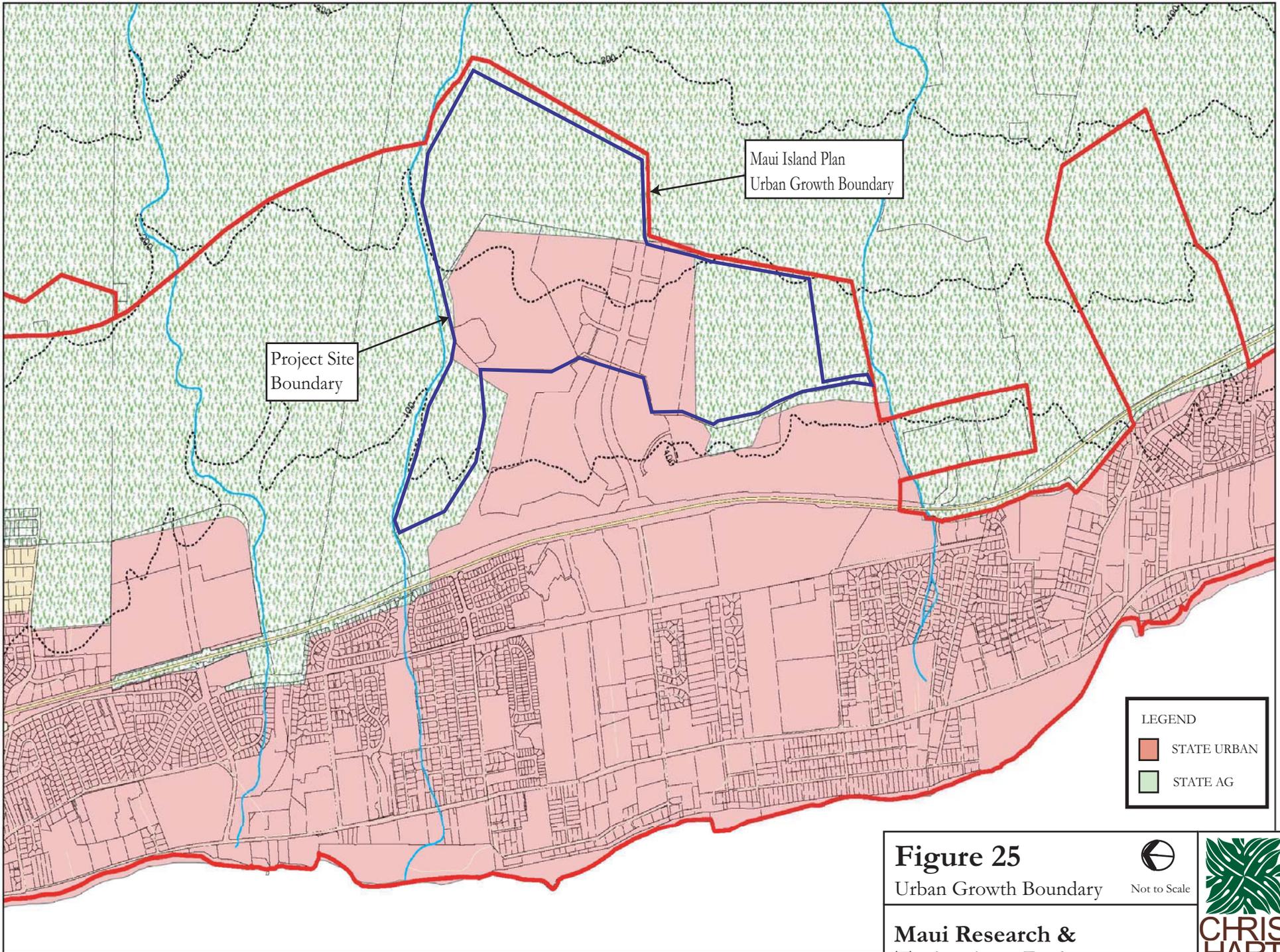
State Land Use Districts

- URBAN
- AGRICULTURE

Figure 24
State Land Use Map

Not to Scale





Project Site
Boundary

Maui Island Plan
Urban Growth Boundary

LEGEND

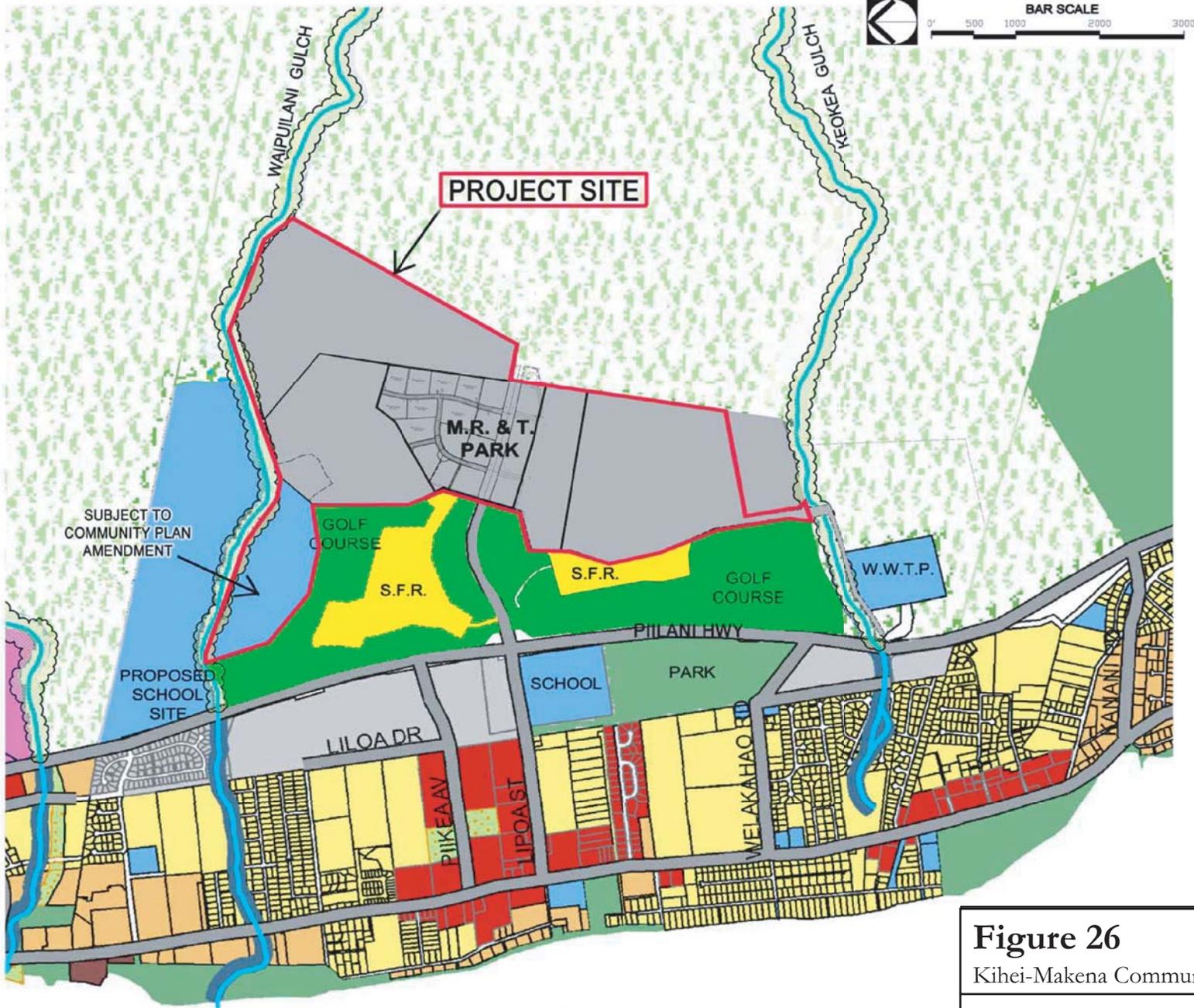
- STATE URBAN
- STATE AG

Figure 25
Urban Growth Boundary



**Maui Research &
Technology Park**





Legend

COMMUNITY PLAN DESIGNATION

| | |
|--|---------------------------|
| | Agriculture |
| | Business / Commercial |
| | Hotel |
| | Light Industrial |
| | Multi-family Residential |
| | Open Space |
| | Open Space - Coastal |
| | Park |
| | Park (Golf Course) |
| | Project District |
| | Public / Quasi-Public |
| | Single Family Residential |

Figure 26

Kihei-Makena Community Plan

Maui Research & Technology Park



CHRIS HART & PARTNERS, INC.



Not to Scale

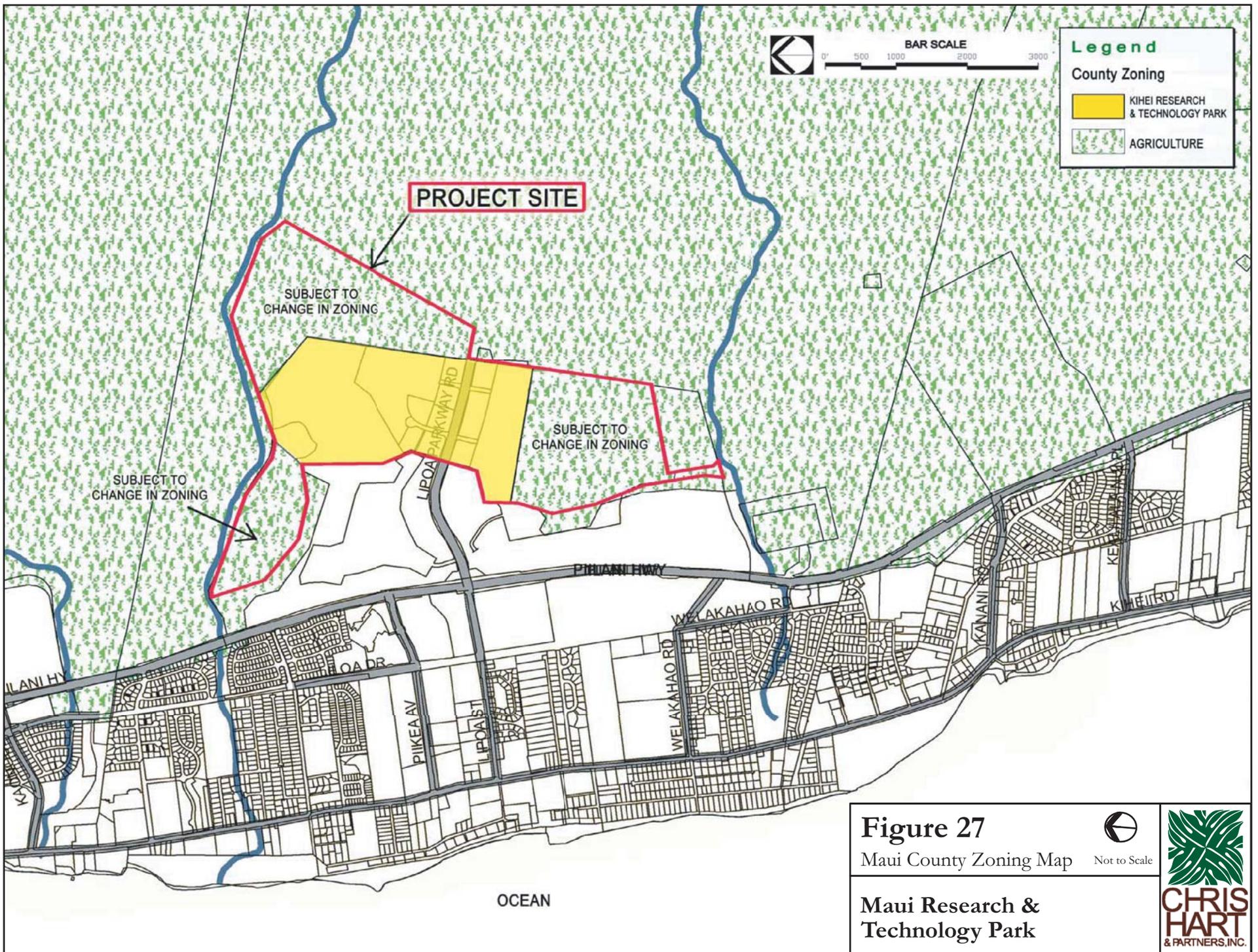


Figure 27
Maui County Zoning Map

Not to Scale

Maui Research & Technology Park





III. AFFECTED ENVIRONMENT, POTENTIAL IMPACTS AND MITIGATION MEASURES

A. PHYSICAL ENVIRONMENT

1. Surrounding Land Uses

Existing Conditions. The MRTP is immediately surrounded by undeveloped agricultural lands of the Haleakala and Kaonoulu Ranches to the north, east, and south. Further to the South of the site is the Monsanto farm facility and the Kihei Wastewater Treatment Facility (KWWTF). The Elleair Golf Course and gated community are located to the west of the site mauka of Piilani Highway.

Seaward, across Piilani Highway, are the developed lands of Kihei Town, including single and multi-family subdivisions, the Kihei Community Center, Piilani Shopping Village, South Maui Community Park as well as industrial and public/quasi-public developments.

Waipuilani Gulch abuts the property on the north and Keokea Gulch abuts on the south. The new South Maui High School is proposed for land abutting the north-west corner of the property, across Waipuilani Gulch.

The Community Plan map presents an illustration of the range of potential ~~figure~~ future land uses planned within the immediate area (See: Figure No. 26, “Kihei-Makena Com-



munity Plan Map”). The following is a description of zoning, community plan designations, and existing land uses adjacent to the subject property:

- North:** Community Plan: Public/Quasi-Public; Agriculture
State Land Use: Agriculture
Zoning: Agriculture
- Existing Uses:** Ranch Lands; Future Kihei High School
- South:** Community Plan: Public/Quasi-Pubic; Agriculture
State Land Use: Agriculture
Zoning: Agriculture
- Existing Uses:** Ranch Lands; Kihei Wastewater Treatment Facility
- East:** Community Plan: Agriculture
State Land Use: Agriculture
Zoning: Agriculture
- Existing Uses:** Ranch Lands
- West:** Community Plan: Park; Single-Family; Project District 5
- State Land Use: Urban
Zoning: Golf Course; R-1 Residential
- Existing Uses:** Elleair Golf Course; Single-Family Residential; Piilani Village residential subdivision; Kihei Community Center; Piilani Shopping Village; South Maui Community Park

Potential Impacts and Mitigation Measures. The project area is designated Project District 6, “Kihei Research & Technology Park” and “Public/Quasi-Public” by the Kihei-Makena Community Plan and has thus been designated for future urban development since the 1980’s.



To the East or mauka of the site is Haleakala Ranch land used for grazing. The proposed mixed use development would include the urbanization of land that would be developed as ~~single-family~~ housing. The development is not expected to impact the operations of the mauka grazing land. Proper livestock fencing along the property boundary will ensure that grazing animals are kept separate from the site.

The MRTP has an established wastewater connection with the KWWTF and will continue to coordinate its wastewater demand with the County as the MRTP site evolves.

The development of the MRTP site is not expected to have a significant impact on the existing land uses makai of the site. The Elleair Golf Course currently shares Lipoa parkway with the MRTP. Operation and construction phase mitigation measures described in Section III.D.1, *Roadways*, of this report will mitigate project impacts and neighboring land uses.

The proposed development will not impact the Waipuilani gulch and would provide sufficient capacity for additional housing needs that may occur after the High School is built and Kihei's population increases.

As previously mentioned, across the Piilani Highway is Kihei Town, which includes single and multi-family subdivisions, the Kihei Community Center, shopping and park facilities as well as industrial and public/quasi-public developments. The MRTP Master Plan Update will serve the County's goal of creating greater economic diversification while ensuring that supporting housing and services are in close proximity to jobs, as is widely recognized as best planning practice today. The uses proposed at the MRTP are compatible with the State Land Use Urban District.

2. Topography and Soils

Existing Conditions. Geologically, the island of Maui is comprised of two shield volcanoes, Mauna Kahalawai (West Maui Mountains) in the west, and Haleakala to the east. These land forms create the subsections of Maui characterized as East and West Maui.

The site of the MRTP is situated in Kihei, mauka of Piilani Highway in an area identified as the "Barren Zone". The Barren Zone is an intermediary zone between the more pro-



ductive coastline and upland forests areas. This zone includes sediments that are shallow, most often overlying bedrock, and perennial water sources are virtually nonexistent.

Elevations across the project site range from approximately 270 feet above Mean Sea Level (MSL) along the easterly boundary to approximately 160 feet MSL along the westerly boundary and approximately 73 feet at the Lipoa Parkway / Piilani Highway intersection. The average slope across the project site is 3.2%, although there are variations in the slopes on the knolls and gullies within the MRTP site (See: Figure 28, "Existing Site Topography").

The MRTP site includes a single soil type, as described in the *Soil Survey of the Islands of Kauai, Oahu, Maui, Molokai, and Lanai, State of Hawaii* (See: Figure 29, "Soil Survey Map"). This soil type, "Waiakoa extremely stony silty clay loam", 3 to 25 percent slopes, eroded (WID2), is characterized by medium runoff and severe erosion hazard, with at least half the surface layer eroded in most areas. According to the soil survey this soil is typically used for pasture and wildlife habitat.

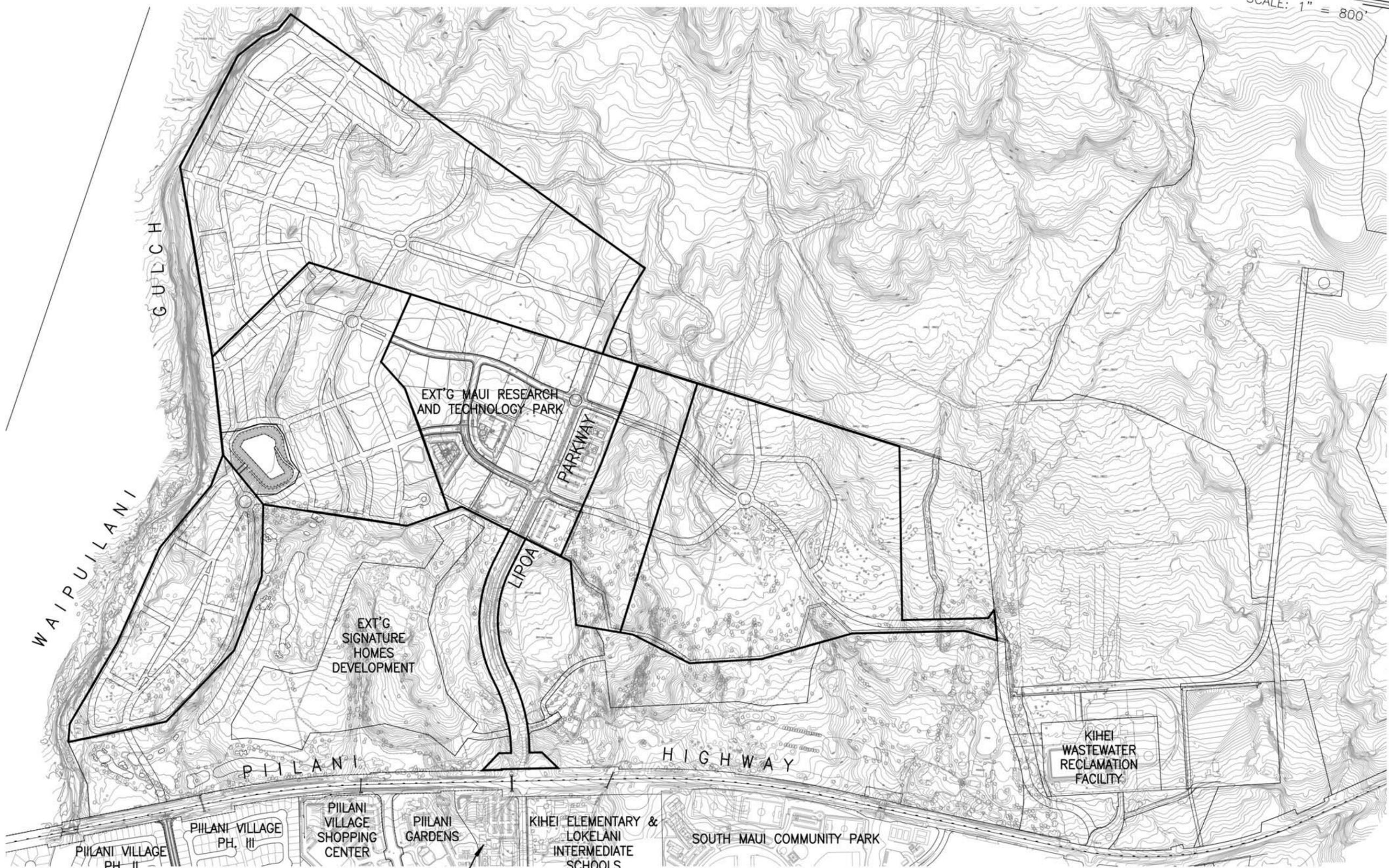
Potential Impacts and Mitigation Measures. Implementation of the Master Plan Update will require grading for roads and buildings upon development, for areas not currently developed.

A National Pollutant Discharge Elimination System (NPDES) permit will be required from the State of Hawaii, Department of Health (DOH) prior to grading activities. During site preparation, storm runoff from the MRTP will be controlled in compliance with the County's "Soil Erosion and Sediment Control Standards". Typical mitigation measures include appropriately stockpiling materials on-site to prevent runoff and building over or establishing landscaping as early as possible on disturbed soils to minimize length of exposure.

Impacts to the soils include the potential for soil erosion and the generation of dust during construction. Clearing and grubbing activities will temporarily disturb the soil retention values of the existing vegetation and expose soils to erosion forces. Some wind erosion of soils could occur without a proper watering and re-vegetation program. Heavy rainfall could also cause erosion of soils within disturbed areas of land.

V:\Projdata\08proj\08028 (Maui R&T Park - Master Plan)\dwg2008\exhibits\Land Use-00.dwg

TRUE NORTH
SCALE: 1" = 800'



EXISTING SITE TOPOGRAPHY



SCALE: 1 IN. = 800 FT.

FIGURE 28
EXISTING SITE TOPOGRAPHY

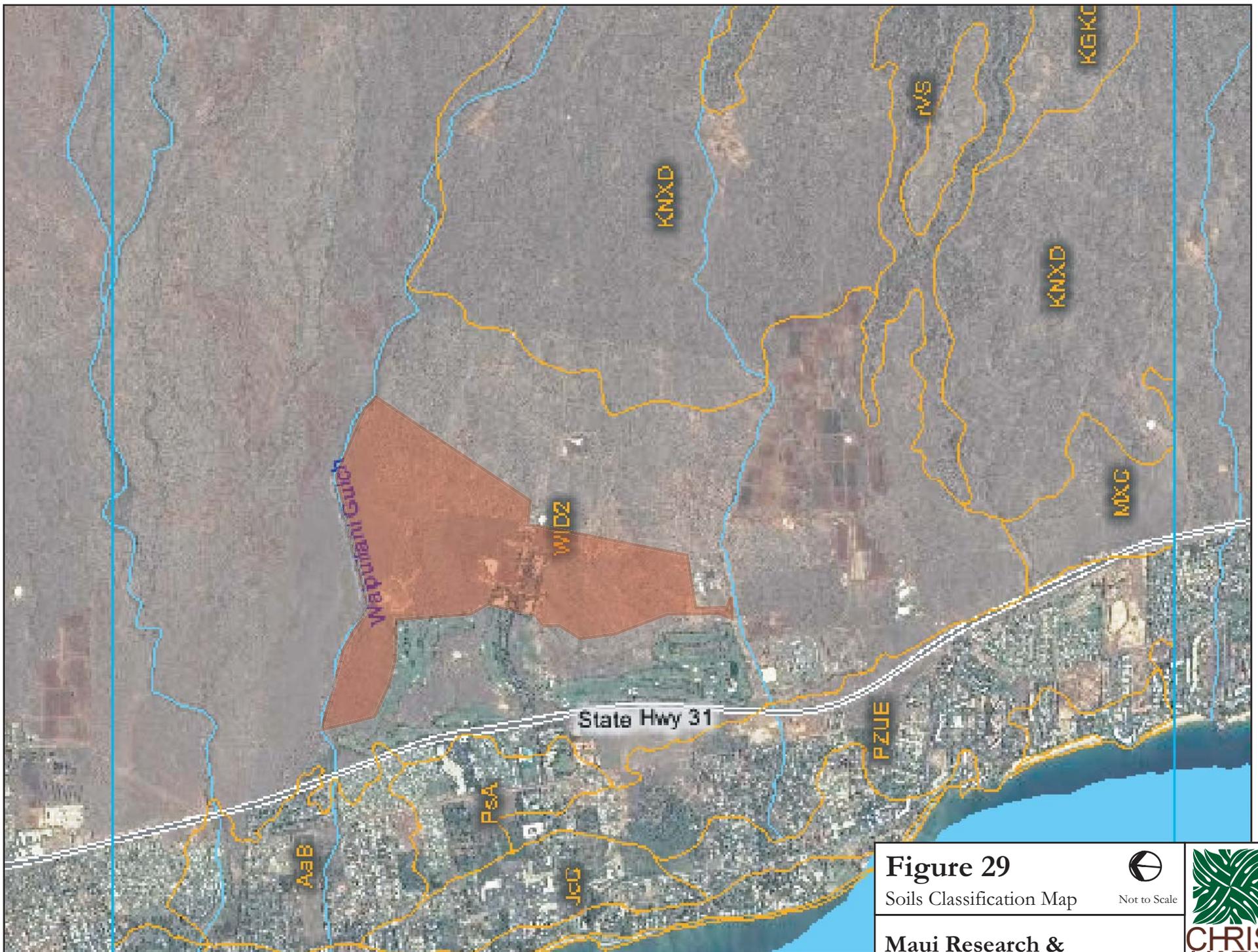


Figure 29
Soils Classification Map



**Maui Research &
Technology Park**





To the extent possible, improvements will conform to the contours of the land, further limiting the need for extensive grading of the site. In addition, graded areas will be limited to specific areas for short periods of time.

Measures taken to control erosion during the site development period may include:

- Minimizing the time of construction;
- Retaining existing ground cover as long as possible;
- Constructing drainage control features early;
- Using temporary area sprinklers in non-active construction areas when ground cover is removed;
- Providing a water truck on-site during the construction period to provide for immediate sprinkling as needed;
- Using temporary berms and cut-off ditches, where needed, for control of erosion;
- Watering graded areas when construction activity for each day has ceased;
- Grassing or planting all cut and fill slopes immediately after grading work has been completed; and
- Installing silt screens where appropriate.

Construction activities on the property will comply with all applicable Federal, State and County regulations and rules for erosion control. Before issuance of a grading permit by the County of Maui, the final erosion control plan and best management practices required for the NPDES permit will be completed. All construction activities will also comply with the provisions of Chapter 11-60.1, Hawaii Administrative Rules (HAR), Section 11-60.1-33, pertaining to Fugitive Dust.

After construction, the establishment of permanent landscaping will provide long-term erosion control.

3. Natural Hazards

Existing Conditions. Natural hazards impacting the Hawaiian Islands include hurricanes, tsunamis, volcanic eruptions, earthquakes, and flooding.



Seismic hazards are those related to ground shaking. Landslides, ground cracks, rock falls and tsunamis are all seismic hazards. Engineers and other professionals have created a system of classifying seismic hazards on the basis of the expected strength of ground shaking and the probability of the shaking actually occurring within a specified time. The results are included in the Uniform Building Code (UBC) seismic provisions.

The UBC seismic provisions contain six seismic zones, ranging from 0 (no chance of severe ground shaking) to 4 (10% chance of severe shaking in a 50-year interval). Kauai County is located in Zone 1, County of Honolulu is Zone 2A, county of Maui is Zone 2B and County of Hawaii is Zone 4.

In addition to seismic hazards, devastating hurricanes do occur and have impacted Hawaii twice since 1980: Hurricane Iwa in 1982 and Hurricane Iniki in 1992. While it is difficult to predict these natural occurrences, it is reasonable to assume that future events could be likely given the recent record.

Tsunamis are large, rapidly moving ocean waves triggered by a major disturbance of the ocean floor, which is usually caused by an earthquake but sometimes can be produced by a submarine landslide or a volcanic eruption. About 50 tsunamis have been reported in the Hawaiian Islands since the early 1800s, including the most recent Tsunami as a result of the March 2011 earthquake in Japan. The MRTTP is outside of the Civil Defense Tsunami Evacuation Zone.

Volcanic hazards are not a concern in the South Maui area due to the dormant status of Haleakala.

In Hawaii, most earthquakes are linked to volcanic activity, unlike other areas where a shift in tectonic plates is the cause of an earthquake. Each year, thousands of earthquakes occur in Hawaii, the vast majority of them so small they are detectable only with highly sensitive instruments. However, moderate and disastrous earthquakes have also occurred.

The 1938 Maui Earthquake, with a magnitude of 6.7-6.9 on the Richter scale and an epicenter six (6) miles north of Maui, created landslides and forced the closure of the road to Hana. Damaged water pipes and ground fractures also were reported in Lahaina. More recently, on October 16, 2006, a 6.7 magnitude earthquake struck on the underwa-



ter segment of the major rift zone of the Hualalai volcano on the northwest side of the Island of Hawaii. The earthquake caused rockslides and some damage to roadways on Maui.

Flood hazards are primarily identified by the Flood Insurance Rate Map (FIRM) prepared by the United States Department of Homeland Security- Federal Emergency Management Agency (FEMA), National Flood Insurance Program. According to the September 2009 update of Federal Insurance Rate Map (FIRM) Panel 1500030586E, the MRTP is located in Zone X, which represents an area outside of flood hazard (See: Figure 30, "Flood Insurance Rate Map").

Potential Impacts and Mitigation Measures. Any structures built within the MRTP site will be constructed for protection from earthquakes and the destructive winds and torrential rainfall of tropical hurricanes, in accordance with the Building Code adopted by the County of Maui. All work will comply with applicable flood zone standards, such as those set forth in Chapter 19.62, "Flood Hazard Areas", Maui County Code.

According to the Flood Insurance Rate Map (FIRM) prepared by the United States Department of Homeland Security - Federal Emergency Management Agency, the entire property is located in Zone X, which are areas determined to be outside the 0.2% annual chance floodplain.

The MRTP project site is located approximately one (1) mile from the coast and is not anticipated to be affected by natural hazards such as storms events or flooding. In addition, the proposed development will be designed with a drainage system including detention basins to provide relief to the neighboring properties with regard to flood hazard potential. (See: Appendix F "Preliminary Engineering and Drainage Reports").

4. Hazardous Substances

Existing Conditions. A Phase I Environmental Site Assessment of the MRTP site was prepared by Malama Environmental, LLC in May 2007. (See: Appendix B, "Environmental Site Assessment"). The investigation and report format follows the guidelines of the American Society of Testing and Materials (ASTM) Publication E1527-05, which is recognized by 40 CFR Part 312 as an acceptable guidance document for satisfying the EPA's final "All Appropriate Inquiries" rule.



After a review of records the Environmental Site Assessment (ESA) noted that there were no current investigations of the site under any Federal, State, or local environmental agency.

The field survey focused on identifying physical recognized environmental conditions on the property and assessing the property in relation to surrounding land uses and natural surface features. The following observations were made during the field survey:

- The MRTP predominately consist of undeveloped grazing lands with no permanent building structures.
- Two construction baseyards are located on-site.
- Approximately two (2) gallons of waste oil in an oil pan were observed, and related ground soil staining.
- A limited amount of solid waste dumping was evident including Special Waste that requires proper management.
- One (1) groundwater well is located on-site.
- One small-scale sewer pump station is located on site.
- The bulk storage/use of hazardous/regulated materials was not noted on site.

Potential Impacts and Mitigation Measures. The ESA found no evidence of recognized environmental conditions at the property. Recognized environmental conditions are the presence or likely presence of any hazardous substance or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property, or into the ground, ground water, or surface water of the property. In addition, the ESA stated that there was no evidence of historic or current significant misuse of hazardous or regulated substances on the subject property. (See: Appendix B, “Environmental Site Assessment”).

The potential concerns identified by the ESA were limited in scope and will be mitigated prior to or during project development.

The ESA report recommended that waste oil and related surface oil staining should be properly managed and underlying soils should be tested to confirm all contamination



has been effectively removed. The two construction base yards and solid waste items dumped on site (i.e. derelict vehicle, batteries, tires, waste oil,) have been removed.

The Applicant is proposing the following mitigation measures based on comments from the Department of Health, Solid and Hazardous Waste Branch:

1. The contractor will make arrangements to properly dispose of construction materials in a safe manner, at State Department of Health (DOH)-permitted facilities on Maui.
2. There is no proposed reuse of concrete at the MRTP.
3. There are new construction materials disposal facilities being proposed on Maui, and the contractor will properly dispose of new construction gypsum and plaster during the construction phase.
4. Treated wood waste from new construction will not be recycled. Wood waste will be disposed of at a DOH-permitted disposal facility.
5. During construction non-reusable glass will be disposed of at a DOH-permitted disposal facility.
6. Green waste will be sent to a DOH-permitted facility on Maui. Whenever feasible the developer will keep tree removal to a minimum.

The remaining potential concerns identified by the ESA are limited in scope and will be mitigated prior to or during project development. No impacts from hazardous substances are anticipated at the MRTP site, based on the conclusions of the Phase I ESA. (See: Appendix B, "Environmental Site Assessment".)

5. Flora and Fauna

Existing Conditions. Botanical and Faunal Surveys were conducted for the MRTP site by Mr. Robert W. Hobdy in October 2008. (See: Appendix C-1) SWCA Environmental Consultants conducted additional botanical and wildlife reconnaissance surveys of the property on February 23 and March 31, 2011 (See: Appendix C-2).



The project site was originally populated with dry native forest/scrubland plant species. These species have gradually diminished over the past 150 years as the area has been used extensively for cattle grazing. Introduced Axis deer and human-resultant fires have further reduced the native plant population.

The site is now dominated by two (2) non-native species: *kiaawe* trees and buffelgrass. A total of fourteen (14) species were noted during site surveys, of which two (2) were native to the Hawaiian Islands: *'ilima* and *'uhaloa*.

Three (3) mammalian species were noted in the surveys: cattle, Axis deer, and feral cats. Fourteen (14) non-native bird species were recorded as well. Using sight survey and a bat listening device, the surveys found no evidence of the Hawaiian hoary bat (*Lasiurus cinereus semotus*). The bat is the only land mammal native to the Hawaiian Islands. The report also found no evidence of the Blackburn's sphinx moth (BSM). The BSM (*Manduca blackburni*) is Hawaii's largest native insect. The bat and the moth are on the Federal list of Endangered Species.

Potential Impacts and Mitigation Measures. Two (2) of the twelve (12) plant species identified on the property by Robert Hobdy in October 2008 are indigenous to Hawaii (*'ilima* and *'uhaloa*). Hobdy noted that *'ilima* was rarely observed on the property, and *'uhaloa* was also uncommon there.

The USFWS comment letter to the EISPN dated October 28, 2010 (See: Appendix C-3) indicated that additional surveys should be conducted to determine the presence of endangered species on the MRTP property. In response to the October 28, 2010 comment letter, the Applicant retained SWCA to conduct additional survey work.

Both Hobdy and SWCA found the area to be dominated by non-native *kiaawe* and buffelgrass. SWCA found an additional nine (9) plant species not previously reported by Hobdy, all of which were non-native (See: Appendix C-2). The Obscure Morning Glory (*Ipomoea obscura*), a possible host plant for the adult BSM, was found to be rare; however, no species confirmed as larval host plants for the BSM were found within the MRTP properties. No additional species of wildlife other than those reported by Hobdy were observed by SWCA within the properties in February and March 2011. No listed or candidate endangered species of plants or animals were observed within the property.



The Applicant responded to USFWS on April 27, 2011 (See: Appendix C-4) and received another response letter from USFWS dated June 7, 2011. (See: Appendix C-5) The letter provided guidance to assess project impacts to federally listed species and native habitats.

The Applicant responded to the letter on August 24, 2011 (See: Appendix C-6) ~~and intends to incorporate the following measures into the project to minimize potential impacts.~~ As part of the Draft EIS review process, the USFWS prepared another comment letter dated August 3, 2012 similar to the previous letters. The Applicant responded to the letter on October 12, 2012 (See: Table 28) and intends to incorporate the following measures into the project to minimize potential impacts.

Avoid Direct Impacts to Hawaiian Hoary Bats. To minimize the potential impacts to the Hawaiian Hoary bat, woody plants greater than fifteen (15) feet tall will not be removed or trimmed between June 1 and September 15 throughout the development and operation of the project. These dates were provided by the USFWS in a letter dated June 7, 2011 (See: Appendix C-5).

Minimize Light Impacts to Seabirds. Outdoor lighting will be minimized to the extent practicable to help avoid creating an attractive nuisance to Newell's shearwaters (*Puffinus newelli*) and Hawaiian petrels (*Pterodroma sandwichensis*) that might transit over the property at night. Outdoor lights will be shielded so that the bulb can only be seen from below in accordance with the guidelines for light fixtures provided in the USFWS letter dated October 28, 2010 (See: Appendix C-2 3).

Minimize Attraction and Impacts to Listed Birds. Development of the MRTP will not involve the creation of golf course(s) or permanent open water features, which typically attract bird species. Tenants will be expected to comply with Maui County leash laws. Maui R&T Partners, LLC will institute a pest control program administered by groundskeepers aimed primarily at rodent and feral animal control.

Avoid or Address Impacts to the Blackburn's Sphinx Moth. No known larval host plants for the Blackburn's sphinx moth have been observed within the MRTP property. Another comprehensive survey for endangered Blackburn's sphinx moth host plants will be conducted just prior to land clearing to ensure that the species and its habitat will



not be affected by the proposed project. As recommended by the USFWS in a letter dated June 7, 2011 (See: Appendix C-5).

Survey for Yellow-Faced Bees and Protected Plant Species. Biologists from SWCA Environmental Consultants surveyed the MRTP property in February and March 2011 and found no listed or candidate endangered plants species. In June 2010, the USFWS announced that it would take a year to review the status of seven (7) species of Hawaiian yellow-faced bees to determine whether they should be listed as endangered species and if critical habitat should be designated (Federal Register: 6/10/10; Vol. 75, No. 115). A number of the bee species exist on islands in Maui County. The bees play a critical role in pollinating native Hawaiian Plants. Dr. Karl Magnacca has indicated that so far these rare bees are only known to be from areas *dominated* by native plant communities (K. Magnacca, University of Hawaii at Hilo, personal communication). Since the MRTP is dominated by non-native grasses and scrub vegetation and *'ilima* is uncommon here, SWCA concluded that it is highly unlikely that the MRTP property is habitat for Hawaiian yellow-faced bees.

Minimize Wildfire Impacts. During project construction, measures will be taken to maintain a sufficient fire break along the boundaries of the proposed MRTP expansion. When completed, the MRTP will remove all non-native grass, weed, and scrub fuels from the project area. Undeveloped lands immediately adjacent to the northern, and eastern and southern boundaries of the MRTP are owned by Kaonoulu Ranch and Haleakala Ranch, respectively. These lands serve as a de facto fire break for MRTP because they are currently zoned for Agriculture and are actively grazed by cattle. Grazing plays a key role in minimizing fuel loads on privately owned lands outside the project footprint. In addition to the Kihei Fire Station (11 Waimahaihai Street) which lies about 1.5 miles from the project site, the MRTP is currently serviced by the Wailea Fire Station (300 Kilohana Drive) which is located approximately 2 miles from the site. Additional fire control support is also available from Windward Helicopters and Pacific Helicopters at the Kahului Airport. To service the area, the completed MRTP will have fire hydrants and water pressures as required by law. The Applicant will also work with the County Fire Prevention Bureau to minimize potential wildfire risks within and adjacent to the MRTP footprint. The Applicant will continue to coordinate with the USFWS on wildfire prevention and response measures throughout the planning process.



Minimize the Spread of Invasive Species. During land clearing and construction associated with expansion of the MRTP, care will be taken to prevent the invasion of disturbed areas by noxious invasive weed species, non-native tree tobacco, and other potential non-native host plants of the Blackburn's sphinx moth. However, to minimize the potential for introducing new invasive plants to the project area, Maui R&T Partners, LLC will ensure that off-site sources of revegetation materials (seed mixes, gravel, mulches, etc.) are certified weed-free. All areas that are hydroseeded would be monitored for six months after hydroseeding to ensure removal of any invasive plants that have established from seeds inadvertently introduced as part of the seed mixes. Building supplies imported to Maui for construction will be regularly inspected at Kahului Harbor for presence of alien species.

The MRTP will employ a palette of suitable native plant species which are known to occur within the natural dry scrubland habitats native to the Kihei area for landscaping. To the extent practicable, the MRTP will utilize seeds of native species previously harvested from the Kihei environs and available from local nurseries and related sources. Specific species suitable for use may include, but may not be limited to, koai'a (*Acacia koaia*), native wiliwili (*Erythrina sandwicensis*), kolomana (*Senna gaudichaudii*), and kou (*Cordia subcordata*). Other native plants, such as 'a'ali'i (*Dodonea viscosa*), 'āhinahina (*Achyranthes splendens var. rotunda*), 'āwikiwiki (*Canavalia pubescens*), kulu'i (*Nototrichium sandwicense*), maiapilo (*Capparis sandwichiana*), naio (*Myoporum sandwicense*), 'ōhai (*Sesbania tomentosa*), pili (*Heteropogon contortus*), and ti leaf (*Cordyline fruticosa*) can be used throughout the site to the extent possible.

6. Air Quality

Existing Conditions. An Air Quality Study was prepared by B.D. Neal & Associates which examines the potential short- and long-term air quality impacts that could occur as a result of construction and use of the proposed Project and suggests mitigative measures to reduce any potential air quality impacts where possible and appropriate (See: Appendix L K, "Air Quality Study" and Appendix K-1 "Letter from Air Quality Consultant").



Regional and local climate together with the amount and type of human activity generally dictate the air quality of a given location. The climate of the project area is very much affected by its elevation near sea level and by nearby mountains.

Haleakala shelters the area from the northeast trade winds, and local winds (such as land/sea breezes and upslope/downslope winds) affect the wind flow in the area much of the time. Temperatures in the project area are generally very consistent and warm with average daily temperatures ranging from about 63 degrees F to 86 degrees F. Rain fall in the project area is minimal with an average of only about 12 inches per year. Except for periodic impacts from volcanic emissions (vog) and possibly occasional localized impacts from traffic congestion and local agricultural sources, the present air quality of the project area is believed to be relatively good. There is very little air quality monitoring data from the Department of Health for the project area, but the limited data that are available suggest that concentrations are generally well within state and national air quality standards.

To assess current ambient air quality conditions, a computer modeling study was undertaken of carbon monoxide at intersections in the project vicinity and to predict future levels both with and without the proposed project. During worst-case conditions, model results indicated that present 1-hour and 8-hour carbon monoxide concentrations are well within both the state and the national ambient air quality standards.

Potential Impacts and Mitigation Measures. Short- and/or long-term impacts on air quality will occur either directly or indirectly as a consequence of project construction and use. Short-term impacts from fugitive dust will likely occur during the project construction phases. To a lesser extent, exhaust emissions from stationary and mobile construction equipment, from the disruption of traffic, and from workers' vehicles may also affect air quality during the period of construction. State air pollution control regulations require that there be no visible fugitive dust emissions at the property line. Hence, an effective dust control plan must be implemented to ensure compliance with state regulations. Fugitive dust emissions can be controlled to a large extent by implementing the following types of mitigation measures:

- Watering of active work areas;
- Using wind screens;
- Keeping adjacent paved roads clean; and



- Covering open-bodied trucks.
- Limiting the area that can be disturbed at any given time;
- Mulching or chemically stabilizing inactive areas that have been worked.

Paving and landscaping of project areas early in the construction schedule will also reduce dust emissions. Monitoring dust at the project boundary during the period of construction could be considered as a means to evaluate the effectiveness of the project dust control program. Exhaust emissions can be mitigated by moving construction equipment and workers to and from the project site during off-peak traffic hours. During development, adequate dust control measures, in compliance with HAR, Chapter 11-60.1, "Air Pollution Control," Section 11-60.1-33, Fugitive Dust will be implemented to control dust during all phases of construction.

After construction, motor vehicles coming to and from the proposed development will result in a long-term increase in air pollution emissions in the project area. To assess the impact of emissions from these vehicles, a computer modeling study was undertaken to estimate current ambient concentrations of carbon monoxide at intersections in the project vicinity and to predict future levels both with and without the proposed project. During worst-case conditions, model results indicated that present 1-hour and 8-hour carbon monoxide concentrations are well within both the state and the national ambient air quality standards.

In the year 2034 without the project, carbon monoxide concentrations were predicted to decrease (improve) somewhat in the project area despite an increase in traffic volumes, and worst-case concentrations should remain well within air quality standards. This is primarily due to the assumed retirement of older motor vehicles with less efficient emission control equipment with the passage of time. With the project in the year 2034 after full build-out and with the mauka collector road, carbon monoxide concentrations compared to the without-project case were projected to be slightly lower (better), and worst-case concentrations should remain well within air quality standards.

With or without the project, carbon monoxide concentrations in the project area during the next 20 years will likely decrease (improve) somewhat compared to existing concentrations. Implementing mitigation measures for traffic-related air quality impacts is probably unnecessary and unwarranted. Additionally, based on the review of the revised TIAR dated February 2013 it is the opinion of the air quality consultant that fur-



ther air quality analysis for this project is unnecessary because it is unlikely that the air quality results and conclusions would change significantly. (See: Appendix K-1 “Letter from Air Quality Consultant”)

Depending on the demand levels, long-term impacts on air quality are also possible due to indirect emissions associated with a development's electrical power and solid waste disposal requirements.

The peak electrical demand of the project when fully developed is expected to reach about 24 megawatts. Assuming the average demand is approximately one-half the peak demand, the annual electrical demand of the project will reach approximately 105 million kilowatt-hours. Quantitative estimates of these potential impacts were not made, but based on the estimated demand level and assuming that power continues to be derived mostly from fuel oil, sulfur dioxide emissions could increase by about 275 tons per year and nitrogen oxides emissions could increase by about 93 tons per year.

Renewable energy sources, if developed, could reduce these emissions substantially. Incorporating energy conservation design features and promoting energy conservation programs within the proposed development could also serve to reduce any associated emissions. Presently, all solid waste on Maui is landfilled, and any associated air pollution emissions are relatively negligible. Nevertheless, promoting conservation and recycling programs within the proposed development could serve to further reduce any associated impacts.

7. Noise Quality

Existing Conditions. The noise level is an important indicator of environmental quality. In an urban environment, noise is due primarily to vehicular traffic, air traffic, heavy machinery, and heating, ventilation, and air-conditioning equipment. Ramifications of various sound levels and types may impact health conditions and an area's aesthetic appeal.

An Acoustic Study was prepared by Y. Ebisu & Associates to describe the existing and future traffic noise levels in the environs of the proposed Park. Traffic noise level increases and impacts associated with the project were determined within the project site and along public roadways servicing the development. Impacts from on-site activities



and short-term construction noise at the project site were also assessed. Recommendations for minimizing noise impacts are also provided (See: Appendix M L, “Acoustic Study” and Appendix L-1 “Letter from Acoustic Study Consultant”).

The existing background ambient noise levels within the project site are relatively low at the mauka (east) end and moderate on the makai (west) end of the site. Traffic along Piilani Highway controls the background noise levels at the makai end of the project site, and diminishes to inaudible levels at the mauka end of the project site. On the makai side of Piilani Highway, existing noise levels also diminish with increasing distances from Piilani Highway, and are controlled by the traffic on connector roads and South Kihei Road in areas between Piilani Highway and the shoreline.

The existing traffic noise levels in the project environs along Piilani Highway are in the “Significant Exposure, Normally Unacceptable” category, and at or greater than 65 Day-Night Average Sound Level (DNL) at the first row of existing homes on the makai side of the highway. The existing traffic noise levels in the project environs along South Kihei Road are in the “Significant Exposure, Normally Unacceptable” categories, and at or greater than 65 DNL within 61 to 67 feet of the roadway’s centerline. Along the lower volume connector streets, existing noise levels are in the “Moderate Exposure, Acceptable” category, and less than 65 DNL at 50 feet or greater distance from the roadways’ centerline.

Potential Impacts and Mitigation Measures. The existing and future noise levels in the vicinity of the Project were evaluated for their potential impacts and their relationship to current FHA/HUD noise standards for noise sensitive land uses. The traffic noise level increases along the roadways servicing the project site were calculated (See: Figure No. 1 of the “Acoustic Study”, Appendix L).

Significant increases in traffic noise levels at noise sensitive properties are not expected to occur as a result of the project traffic following build-out by CY 2024 and 2034.

Along Piilani Highway fronting the project site, traffic noise levels of approximately 70 DNL are expected to increase to approximately ~~74~~ 71 to 73 DNL at 100 foot distance from the centerline by CY 2024 as a result of project and non-project traffic. By CY 2034, traffic noise levels along Piilani Highway are expected to be reduced to existing noise



levels following completion of the proposed north-south collector road on the mauka side of the project site. (See: Appendix L-1 “Letter from Acoustic Study Consultant”).

The largest increases ~~(1.4 to 7.7 DNL)~~ (1.5 to 10.4 DNL) in project related traffic noise are predicted to occur along Lipoa Parkway, East Welakahao Street east of Piilani Highway, and along Lipoa Street west of Piilani Highway. Adverse traffic noise impacts along Lipoa Parkway and East Welakahao Street are not expected to occur since noise sensitive developments are not planned to be located along those two roadways. The noise sensitive buildings along Lipoa Street west of Piilani Highway have adequate setback distances from Lipoa Street, such that predicted CY 2024 and CY 2034 traffic noise levels should remain in the “Moderate Exposure, Normally Acceptable” category at these buildings. For these reasons, traffic noise mitigation measures should not be required. (See: Appendix L-1 “Letter from Acoustic Study Consultant”).

The project site is planned such that noise sensitive residential uses of the project are situated at very large setback distances from Piilani Highway, where existing and future traffic noise levels are predicted to be less than ~~60~~ 61 DNL. The large buffer distances to the highway will allow for the use of naturally ventilated buildings on the project site. (See: Appendix L-1 “Letter from Acoustic Study Consultant”).

The dominant traffic noise sources in the project environs will continue to be traffic along Piilani Highway and South Kihei Road. In addition, the addition of the proposed north-south collector road mauka of the project will increase the existing background ambient noise levels at the mauka end of the project site and along the proposed corridors of the collector road and connecting roadways.

Based on the review of the revised TIAR dated February 2013 it is the opinion of the acoustic consultant that further acoustic analysis for this project is unnecessary because it is unlikely that the acoustic results and conclusions would change significantly (See: Appendix L-1 “Letter from Acoustic Study Consultant”). Unavoidable, but temporary, noise impacts may occur during construction of the proposed project, particularly during the excavation and earth moving activities on the project site. Because construction activities are predicted to be audible within the project site and at nearby properties, the quality of the acoustic environment may be degraded to unacceptable levels during periods of construction. Mitigation measures to reduce construction noise to inaudible levels will not be practical in all cases, but the use of quiet equipment and compliance with



State Department of Health construction noise regulations are recommended as standard mitigation measures. The incorporation of State Department of Health construction noise limits and curfew times are applicable throughout the State. Noisy construction activities are not allowed on Sundays and holidays, during the early morning, and during the late evening and nighttime periods under the DOH permit procedures.

8. Historical and Archaeological Resources

Existing Conditions. An Archaeological Inventory Survey (AIS) was prepared by Scientific Consultant Services (SCS) and completed in September 2008. (See: Appendix D, "Archaeological Inventory Survey"). The purpose of the AIS was to determine the presence/absence of architecture, midden deposits, and/or artifact deposits on the surface of the parcels and to assess the potential for the presence of subsurface cultural deposits.

Previous archaeological investigations have been conducted on and in close proximity to the MRTP site. (Hibbard 1994; Chaffee et al. 1997; McGerty et al. 2000; Sinoto et al. 2001; Tome and Dega 2002; Dega 2003; Monahan 2004) The previous AIS work in and around the MRTP, some of which included subsurface testing, have yielded a modest amount of evidence of historical and traditional human activity. (See: Appendix D, "Archaeological Inventory Survey").

The MRTP site is located mauka of the Piilani Highway in an area of Kihei described as the "Barren Zone". The Barren Zone is an intermediary zone that provides access between coastline/beach areas to upland forests. Based on general archaeological and historical research, the Barren Zone was not subject to permanent or expansive population due to the lack of productive natural resources (water, soil, etc.) As such, previous work documented that architectural structures associated with permanent habitation sites and/or ceremonial sites are not often present in the area while temporary habitation-temporary use sites may be present in the Barren Zone. (See: Appendix D, "Archaeological Inventory Survey").

The AIS located a total of five (5) sites, three (3) on Parcel 17 and two (2) on the portion of Parcel 54.

The State site identification numbers and descriptions of the sites follow below:



1. *Site 50-50-10-6239*: an historic modified outcropping
2. *Site 50-50-10-6240*: an historic modified outcropping
3. *Site 50-50-10-6241*: a traditional or historic boundary wall
4. *Site 50-50-10-6587*: an L-shaped military training feature
5. *Site 50-50-10-6588*: three (3) mounds which are traditional location markers

Potential Impacts and Mitigation Measures. The following significance evaluations are criteria established for the State and National Register of Historic Places. These criteria are as follows:

Criterion A: Site is associated with events that have made a significant contribution to the broad patterns of our history.

Criterion B: Site is associated with the lives of persons significant to our past.

Criterion C: Site embodies the distinctive characteristics of a type, period, or method of construction; or represents the work of a master; or possesses high artistic value; or represents a significant and distinguishable entity whose components may lack individual construction.

Criterion D: Site has yielded or has the potential to yield information important in prehistory or history.

Criterion E: Site has an important traditional cultural value to the native Hawaiian people or to another ethnic group of the state due to associations with traditional cultural practices once carried out, or still carried out, at the property or due to associations with traditional beliefs, events, or oral accounts (State of Hawaii criterion only).

An archaeological site can be considered no longer significant if Criterion D is the only criterion that is applicable and provided sufficient information has been collected from the site during the archaeological investigation.

All sites identified by the AIS have been assessed as significant under only Criterion D. Consistent with the Barren Zone model for pre-contact settlement in the Kihei area, the



project's AIS yielded a very limited number of sites and therefore no further archaeological work is recommended for this project area.

Recommendations set forth by the AIS include the following:

1. Informally preserve the entirety of Site -6241 wall or portion thereof if given the opportunity.
2. Provide an orange protective fence to be placed along Site -6241 wall on northern ridgeline boundary of Parcel 17 to protect two undocumented rock shelters occurring off site below in Waipuilani Gulch.

In a letter dated October 27, 2008 the State Historic Preservation Division determined that the AIS was acceptable and recommended that Site -6241 should be bordered by a protective orange construction fencing prior to ground altering disturbance within TMK: (2) 2-2-024:017 (See: Appendix D-1).

Furthermore in letters dated August 27, 2012 and December 6, 2012 the State Historic Preservation Division determined that no historic properties will be affected by the proposed project (See: Appendix D-2).

9. Visual Resources

Existing Conditions. The MRTP is located on the southern slope of Haleakala, *mauka* (landward) of Kihei Town. Elevations of the project site range from 160 feet above mean sea level near Piilani Highway to approximately 260 feet above mean sea level at the most mauka point of the ~~expansion area~~ MRTP. Existing buildings at the MRTP do not exceed 45 feet in height and are screened by the existing golf course development when viewed from the Piilani Highway. The site is located between two gulches that are natural buffers along the northern and southern edge of the property (See: Figure 8, "Existing Site Conditions").



Notable natural visual resources in the area include the West Maui Mountains, the Pacific Ocean, Molokini and the islands of Kahoolawe and Lanai, to the west, and Haleakala to the east.

Potential Impacts and Mitigation Measures. Environmental Planning Associates Inc. prepared a Maui Coastal Scenic Resources Study for the County of Maui, Planning Department on August 31, 1990 (See: Figure No. 31, "Scenic Resources Map"). The MRTP project site is located in an area with open spaces views. This is expected because most of the land mauka of Piilani Highway in the vicinity of the MRTP is owned by Haleakala Ranch and Kaonoulu Ranch and has been used for cattle grazing, however the land surrounding the MRTP has been designated for Urban expansion for over 20 years by the County of Maui in the Kihei-Makena community plan.

The site ranges from approximately 600 feet to nearly one mile mauka of the Piilani Highway. The furthest makai portion of the site nearest to the highway is planned for single- and multi-family residential use. Residential Building heights within ~~this area~~ the MRTP are limited to 3-stories or ~~45~~ 40-feet, as they are throughout the rest of the Park. Because of the Project's separation/buffer from Piilani Highway and the relatively low profile of the buildings, mauka views of Haleakala from Piilani Highway should not be significantly impacted by the development.

The proposed update to the Master Plan will transform the character of the MRTP from its existing large lot-only design to a community involving parks, housing, neighborhood-serving retail, commercial space, pedestrian and bicycle networks and open space. The Master Plan Design Guidelines will limit building height in order to maintain views towards the summit of Haleakala and the Pacific Ocean. Open space is integrated throughout the Project and, together with the proposed street layout, creates and frames view corridors throughout the MRTP to the Pacific Ocean and to Haleakala.

With regard to design, the proposed project will complement the high quality architectural character of the existing buildings at the MRTP as well as other developed properties in the area. The MRTP design guidelines are being developed to control the density, architectural design, and variation of all buildings in the MRTP without sacrificing views or the aesthetic character of the MRTP. The goals of the master plan urban design are to protect views, access to sunlight and the aesthetic character of the MRTP. As noted, the maximum building height for non-residential buildings within the Park will



be ~~3 stories or 45~~ 50-feet to minimize impacts to views. Overall urban design of the project will position buildings fronting landscaped roadways to screen the massing of the buildings.

All buildings within the MRTP will be designed in accordance with the applicable Maui County building code standards.



10. Agricultural Resources

Existing Conditions. An assessment of the potential impact of the Project on agricultural resources was conducted by Decision Analysts Hawaii, Inc. (See: Appendix K J, “Impacts on Agriculture”).

Approximately 39 acres of grazing land on the MRTP property is currently used by Haleakala Ranch for grazing cattle. The Park site has high solar radiation but poor soils, and the low soil ratings and lack of irrigation water indicate that the property is poorly suited for growing commercial field crops.

LCC The 1972 Land Capability Classification (LCC) by the U.S. Department of Agriculture’s Natural Resources Conservation Service (NRCS) rates soils according to eight levels, ranging from the highest classification level “I” to the lowest “VIII”.

The MRTP site includes a single soil type, as described in the *Soil Survey of the Islands of Kauai, Oahu, Maui, Molokai, and Lanai, State of Hawaii* (See: Figure 29, “Soils Survey Map”). This soil type, “Waiakoa extremely stony silty clay loam”, 3 to 25 percent slopes, eroded (WID2), is characterized by medium runoff and severe erosion hazard, with at least half the surface layer eroded in most areas.

Soil type WID 2 has a rating of “VIIs”. Class VII soils have very severe limitations that make them unsuitable for cultivation and restrict their use largely to pasture or range, woodland, or wildlife habitat. The sub classification “s” indicates that the soils have an unfavorable texture, or are extremely rocky or stony.

ALISH. In 1977, the State Department of Agriculture developed a classification system to identify Agricultural Lands of Importance to the State of Hawaii (ALISH). The classification system is based primarily, though not exclusively, upon the soil characteristics of the lands. The three (3) classes of ALISH lands are: “Prime”, “Unique”, and “Other”, with all remaining lands termed “Unclassified”. When utilized with modern farming methods, “Prime” agricultural lands have a soil quality, growing season, and moisture supply necessary to produce sustained crop yields economically. “Unique” agricultural lands possess a combination of soil quality, growing season, and moisture supply to produce sustained high yields of a specific crop. “Other” agricultural lands include



those that have not been rated as “Prime” or “Unique” but are still considered important agricultural lands.

The lands underlying the MRTP are “Unclassified”. “Unclassified” lands do not meet the criteria for being rated “Prime”, “Unique” or “Other” and are not considered to be agricultural lands of importance to the State of Hawaii. (See: Figure 32, “ALISH Map”).

LSB. The University of Hawaii, Land Study Bureau (LSB), developed the Overall Productivity Rating, which classifies soils according to five (5) levels, ranging from “A”, representing the class of highest productivity soils, to “E”, representing the lowest.

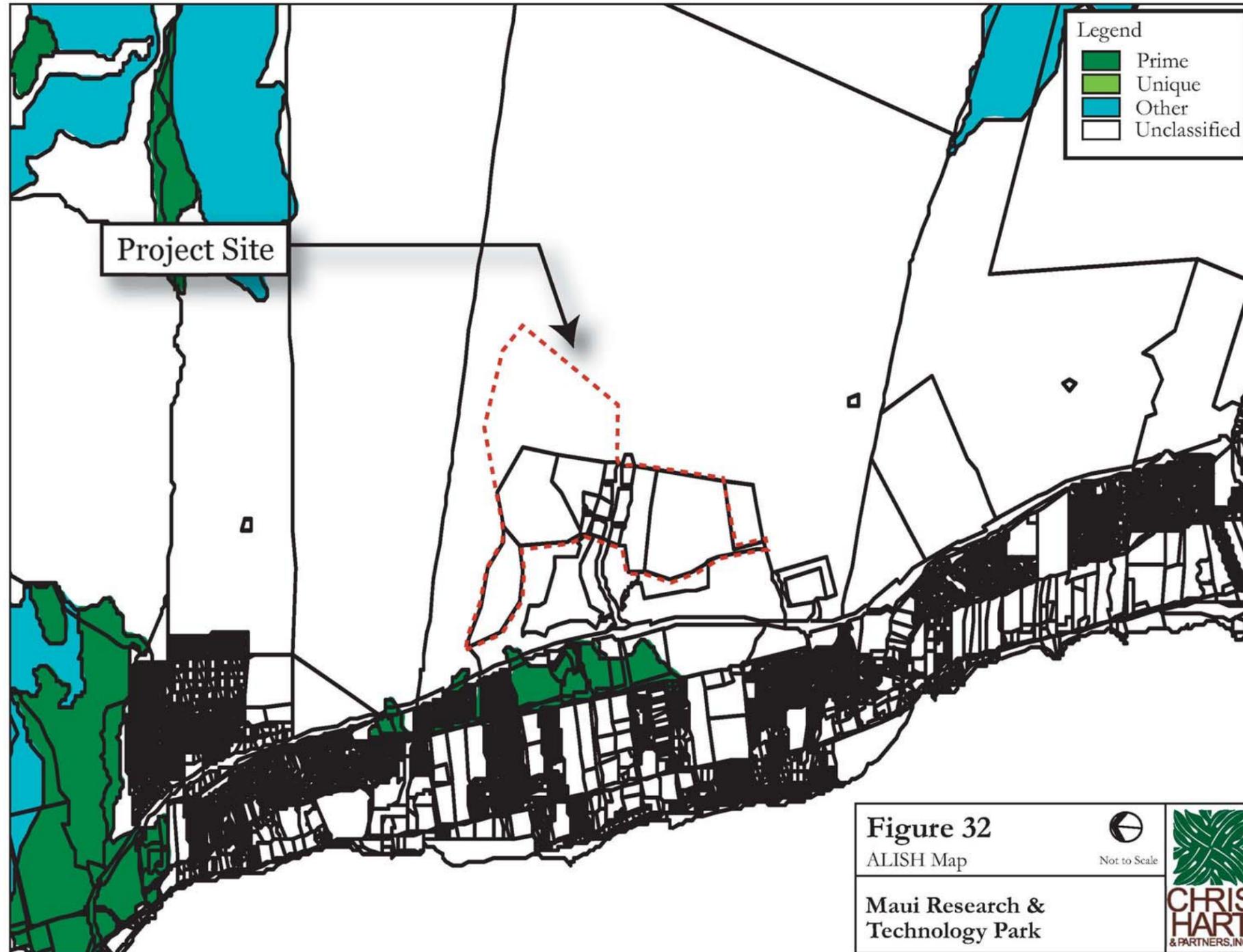
The lands underlying the MRTP were surveyed by the Land Study Bureau, University of Hawaii, in 1967 and are largely classified as “E” with some portions “Unclassified” (See: Figure 33, “LSB Map”).

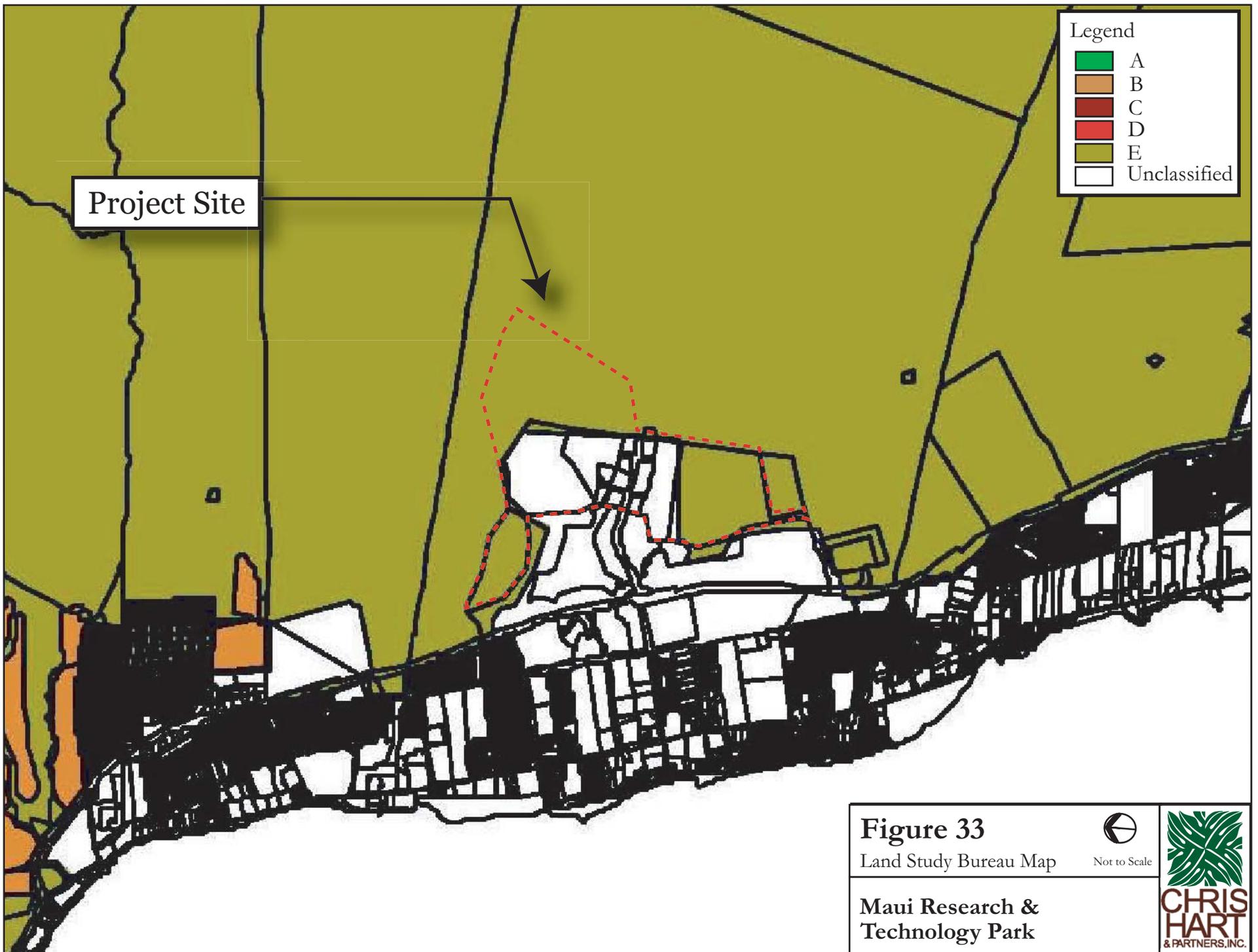
Potential Impacts and Mitigation Measures. The NRCS, LSB, and ALISH classification systems indicate that the proposed project area has poor soils and low soil ratings for productive agricultural uses and therefore the urbanization of the agricultural land is appropriate.

The Project is not expected to impact the neighboring Monsanto 100-acre seed-corn operation to the south. The Monsanto property is over 300 acres and the northernmost field used for growing seed corn is approximately 0.25 miles from the southeast corner of the southernmost expansion area of the Project.

Additionally the Project is not expected to impact Haleakala Ranch. The MRTP project would eliminate 102 acres of grazing land from Haleakala Ranch’s current cattle operations, or about 0.44% of the 23,000 acres of their total grazing land. The Ranch anticipates that this small reduction will not have a significant impact on the cattle operations, including the size of their herd, production, revenues or employment. The Ranch has sufficient lands to move its cattle to other pastures.

Over the next 20 years, planned and proposed projects on Haleakala Ranch grazing land could result in the development of about 419 acres (102 acres for the MRTP project and 317 acres for other projects). The existing grazing lands intended for the expansion of the MRTP are located within the Maui Island Plan’s proposed Urban Growth Boundary.







The MRTP site was previously used for “passive agriculture” (i.e., cattle ranching), and no fertilizers, herbicides, pesticides, or other types of agricultural products were used. The Phase I ESA found no presence or likely presence of any hazardous substance or petroleum products on the property.

In addition there is no evidence of historic or current significant misuse of hazardous or regulated substances on the subject property (See: Appendix B, “Environmental Site Assessment”). In summary the Project will result in a small loss of the large supply of low-quality agricultural land on Maui, and it will not affect in any way the supply of good farmland of which there is also a large supply. Thus, the project is not expected to impact the long-term viability or growth of agriculture on Maui.

11. Groundwater Resources

An assessment of the potential impact of the Project on groundwater resources was conducted by Tom Nance Water Resources Engineering (See: Appendix I, “Assessment of the Potential Impact on Groundwater Resources”).

Existing Conditions. Groundwater beneath the project site occurs as a brackish basal lens overlying saline groundwater at depth and in hydraulic contact with seawater shore. This groundwater body has been named as the Kamaole Aquifer by the State Commission on Water Resource Management (CWRM). The most recent, detailed, and therefore reliable estimate of this aquifer’s rate of recharge and resulting groundwater flow rate is in U.S. Geological Survey Scientific Investigations Report 2007-5103 (Engott & Vana, 2007). The report estimates that the aquifer’s total recharge is 37 MGD, equivalent to an average of about 3.4 MGD per coastal mile of the aquifer. Present pumpage in the aquifer is approximately four to five MGD, most of it occurring for golf course irrigation in the Wailea-Makena area to the south and unlikely to significantly influence the rate of flow beneath the MRTP site.

Potential Impacts and Mitigation Measures. In response to the UH Environmental Center comments, Appendix J “Evaluation of Source of Supply Alternatives for the Planned Expansion of the Maui Research and Technology Park” was removed because the study was mistakenly included in the Draft EIS. The correct “Assessment of the Potential Impact on Groundwater Resources” study was also included in the Draft EIS and



is the correct report. The projected water demand for the Project is approximately ~~1.39~~ 1.17 MGD. Of this amount approximately ~~956,088~~ 798,065 GPD is for drinking water and ~~439,657~~ 373,329 GPD is for non-drinking water. Potable drinking water will be supplied by using brackish groundwater treated to potable quality by reverse osmosis (RO) filtration. Most of the ~~non-potable~~ non-drinking water irrigation use will be wastewater treated to R-1 quality at the County's Kihei Wastewater Treatment Plant (WWTP). The R-1 supply will be supplemented by untreated brackish groundwater when needed.

Two alternatives for brackish well development are described in Section III.D.3 of the DEIS. These alternatives include: 1) Brackish Wells at 580-foot Elevation; and 2) On-site Brackish Wells. The overall impact of the Project on groundwater resources are as follows:

Groundwater Flow Rate beneath the Project Site

The development of well fields will result in a change in the groundwater flow beneath the project site. By developing wells at the 580-foot elevation, the groundwater flow rate is reduced from 6.5 MGD to 5.6162 MGD, or a 13.6% reduction. Drilling on-site reduced the flow rate from 5.1MGD to 4.2162 MGD, or a 17.3% reduction.

Downgrade Users of the Groundwater Resource

In the mauka/makai corridor of potential impact, the groundwater flow rate is about 6.5 MGD. The project's net draft of groundwater from the usable portion of the basal lens is 1.28 MGD for the offsite wells and 1.42 MGD for the onsite wells (See table 3 of the "Assessment of the Potential Impact on Groundwater Resources" in Appendix I). Using the higher number and adding 40,000 MGD in downgradient wells results in a total draft of 1.46 MGD or about 22 percent of the groundwater flow rate in the mauka/makai corridor.

For a thin basal lens such as exists in this area, the CWRM sets the sustainable yield at 44 percent of the groundwater flowrate. By that measure, the MRTP expansion's use of groundwater would be well within the CWRM's definition of the sustainable supply. Even if a more conservative 33 percent as the sustainable supply, the prospective use of groundwater should be sustainable. However, the active downgradient wells are in nearshore locations where some salinity increase to their pumped water as a result of



pumpage of the MRTTP's proposed wells is likely to occur. Based on experience elsewhere, that expectable salinity increase may be on the order of 10 percent.

Changes to Groundwater Quality

Changes to the groundwater flow rate, both as drafts from wells and returns by various processes, will also remove and add nutrients (nitrogen and phosphorus) which will ultimately discharge into the marine environment. To estimate the nutrient loading changes to the marine environment, the following assumptions were made:

- Based on results of the Maui Highlands wells and others, groundwater pumped by well in either field will have concentrations of 1.1 mg/l as nitrogen and 0.06 mg/l as phosphorus.
- The RO process will remove essentially all of the nitrogen and phosphorus from the feedwater and supply it into the concentrate delivered to the disposal wells.
- R-1 reclaimed wastewater from the Kihei WWTP will have concentrations of 15 mg/l as nitrogen and 5 mg/l as phosphorus.
- While the amount of post-development rainfall will be essentially the same as pre-development, it will have increases of nitrogen and phosphorus amounting to 0.3 and 0.6 mg/l, respectively.
- Fertilizer applications in landscaped areas will average three pounds per 1000 ft² per year of nitrogen and 0.5 pounds per year of phosphorus. Of these applied amounts, 10% of the nitrogen and two percent of the phosphorus will be carried with the excess applied irrigation water below the root zone.
- For all water percolating to the groundwater below, natural processes similar to a trickling filter will remove 80 percent of the dissolved nitrogen and 95 percent of the dissolved phosphorus. These removal rates are actually less than the natural removal rates occurring to the Kealakehe WWTP effluent which is disposed of in a shallow pit and ultimately enters the marine environment at the inland end of Honokohau Harbor in Kona on the Big Island. At that location, vertical travel through the vadose zone is only about 50 feet and the movement in groundwater to discharge into the upper end of the harbor is about 3,500 feet. At MRTTP, the drop through the vadose zone and the travel distance to shoreline discharge are substantially greater.



Based on the foregoing assumptions, Table 4 of the “Assessment of the Potential Impact on Groundwater Resources” in Appendix I estimates that the increase in nitrogen is from 0.8 to 0.9 percent and the increase in phosphorus from .03 to .04 percent.

B. SOCIO-ECONOMIC ENVIRONMENT

1. Population

Existing Conditions. The resident population in Maui County has experienced rapid growth. According to census figures the population has more than doubled since 1980, growing from 70,991 to 154,834 today. According to the Maui County Planning Department’s *Socio-Economic Forecast* (2006), Maui County’s population is projected to reach 199,550 people in 2030.

Prior to the 1970s, Kihei was a small coastal village with fewer than 3,000 residents, with very limited resort-oriented and commercial uses. By 1980, the population had more than doubled to about 7,000 persons, substantial commercial space was being developed, and the region was well-established as a desirable locale offering a wide variety of resort units. According to the Maui County Planning Department’s *Socio-Economic Forecast* (2006), the 2005 Kihei-Makena population was 25,609 persons and was forecasted to reach 28,114 persons by 2010 and 38,757 persons by 2030. According to the 2010 Census the combined population for Kihei, Wailea and Makena is 26,918 persons.

In addition to the resident population, for the year 2010 the Maui County Planning Department projects that the Maui Island average visitor census is 49,476 people. The average visitor census is defined as the average number of visitors on an average day. Approximately 21,621 (43 percent of total) of these visitors are in the Kihei-Makena region (Maui County Planning Department 2006). Combining the resident population and the average visitor census, the de facto population of Maui Island is estimated to be 189,765 people in 2010 and 254,448 people in 2030. The de facto population of the Kihei-Makena region is estimated to be 49,735 people in 2010 and 71,908 people in 2030.



Currently the Park property does not contain any residents.

Potential Impacts and Mitigation Measures. An Economic and Fiscal Impact Assessment was prepared for the Project by The Hallstrom Group Inc. in February 2012. (See: Appendix H, “Economic and Fiscal Impact Assessment”). When fully built out, the total resident population of the Park is projected to be 2,756 persons (See: Appendix H, Economic and Fiscal Impact Assessment). The Park will also support up to 5,878 employees. The increase in resident population represents approximately 26 percent of the projected population growth within Kihei-Makena from 2010 to 2030.

2. Housing

Existing Conditions. For a variety of reasons, there has been a generally high appreciation of real estate prices on Maui since the early 1970s. At the same time, the population has expanded significantly, leading to high demand for residential units.

Median home prices have decreased over the last few years after peaking in 2006 and 2007. In April 2012, the year-end median sales price of a single-family home on Maui was \$479,500, a 4.1 percent decrease from the April 2011 median sales price of \$500,000. In the Kihei area, year-end median home prices have generally followed the same moderate downward trend, decreasing 16.3 percent from \$484,273 in April 2012 to \$405,500 in April 2011.⁵

Although median home prices on Maui are decreasing, there remains a large disparity between median home prices and median family income. As of July 2011, the median family income for the island of Maui (except for Hana) is \$76,000 based on income data provided by the U.S. Department of Housing and Urban Development and adjusted by the County of Maui.

According to the ~~draft~~ Maui Island Plan, there will be a demand for an additional 34,637 housing units on Maui through 2030. Of these units, approximately 11,154 are expected to be built on lands not currently entitled for urban development.

⁵ Realtors Association of Maui, April 2012.



Potential Impacts and Mitigation Measures. According to the Economic and Fiscal Impact Assessment prepared for the Project (See: Appendix H“Economic and Fiscal Impact Assessment”), the demand for new residential units in the Kihei-Makena Corridor will be from 7,760 to 12,009 units over the next 24 years (through 2035). The number of existing unsold and planned resident housing units within the ~~Draft~~ Maui Island Plan’s regional “Urban Growth Boundary”, excluding the MRTP, totals approximately 6,634 units. This indicates there will be a shortfall in the sector of from 1,126 to 5,375 new residential units; with a mid-point under-supply of 3,251 units. The study’s analysis indicates that there will be sufficient unmet demand to absorb the Project’s 1,250 units. Of the future demand for resident housing within the region, it is estimated that approximately 43% will be for units with a current price of \$640,000 or less; the upper-price threshold for meeting County affordability standards (140 percent of median household income). Approximately 56% of the proposed product should be single family (homes or lots) and 44 percent multifamily units.

The Master Plan Update would allow for residential uses in conjunction with business uses in the MRTP. It is estimated that long-term regional growth, along with the long-term building-out of the Park, will generate sufficient demand to warrant the construction of additional housing in the MRTP. By locating additional housing within the Park, housing is brought closer to jobs thus reducing commuting time and mitigating traffic congestion.

The Master Plan Update proposes the development of up to 1,250 residential dwelling units targeted at the full spectrum of workers in the development. Homes will be priced for a range of consumer groups, including workforce affordable homes in compliance with Chapter 2.96 MCC (Residential Workforce Housing Policy). All workforce affordable homes will be priced and subject to restrictions in accordance with the requirements of Chapter 2.96, MCC.

In response to comments from the DBEDT LUC, the estimated price ranges of proposed multi-family units will range from \$280,000 to \$400,000, townhomes will range in price from \$400,000 to \$560,000 and single family homes will range in price from \$640,000 to \$1,000,000. A detailed analysis is provided in Appendix S, “Affordable Housing Assessment”).



3. Economy

Existing Conditions. Tourism is the predominant component of Maui County's economy. In Maui County, the Accommodations and Food Service Industry accounts for the largest proportion of jobs at 27 percent. Ranking second is government employment totaling 15 percent. Retail trade, also highly dependent upon tourism, ranks third at 13 percent. Agriculture generates just 2% of Maui County jobs.⁶

Maui County is much more dependant upon tourism than other Hawaii Counties. Of Maui County's Gross County Product (GCP), 39 percent is attributed to tourism, versus a range of 19 to 29% for the other counties⁷. Maui County hosted 2,137,490 visitors in the year 2009 and hotels on Maui Island experienced a 62.1 percent occupancy rate (Maui County Data Book, 2010). In November, 2011 the year-to-date hotel occupancy rate for Maui Island was 71.2 percent.⁸

Contending with Maui's high cost of living, most households support themselves on two or more jobs. Based on a living wage study of Maui County, an analysis of 2005 jobs and wage data for Maui found that the average wage of 78 occupations – representing 54 percent of all jobs – fell below the \$30,800 living wage standard.⁹ According to the Department of Business, Economic Development and Tourism, a family of four (two adults, two children) in Maui County would have needed an annual income of \$63,514 to support itself in 2008.¹⁰

With the current economic recession, unemployment in Maui County has risen from a low of 1.7 percent in December 2006 to a high of 9.4 percent in June 2009. The unemployment rate for September 2011 has dropped from the June high to 7.9 percent. (U.S. Bureau of Labor Statistics)

⁶ Department of Business, Economic Development and Tourism. 2010. *The State of Hawaii Data Book 2010*.

⁷ Hawai'i Tourism Authority, Maui County Tourism Strategic Plan: 2006-2015, 2006, p. 11, citing DBEDT Long Range Forecast, 2005.

⁸ The Maui Weekly. November 21, 2011.

⁹ D. Pearce, the Hawaii Self-Sufficiency Standard, Maui County 2003: update to 2005 based on increase in the Consumer Price Index, U.S. Bureau of Labor Statistics.

¹⁰ Department of Business, Economic Development and Tourism. December 2010. *Self-Sufficiency Standard: Estimates for Hawaii 2008*.



According to the ~~Draft~~ Maui Island Plan (~~October 2009~~), December 2012, diversifying Maui's economy has been a key, longstanding County policy. The Economic Development chapter of the plan includes the following statement in its analysis of the island's challenges and opportunities:

"The Island of Maui, like the County as a whole, faces two fundamental challenges in economic development: (1) diversification; and (2) increasing the number and proportion of *living wage* jobs. There is a subset of more specific challenges, such as the high cost of housing and the need to strengthen public education".

Potential Impacts and Mitigation Measures. An Economic and Fiscal Impact Assessment was prepared for the Project by The Hallstrom Group Inc. in May 2012. (See: Appendix H, "Economic and Fiscal Impact Assessment").

Fuller development of the MRTP is expected to generate short-term economic benefits in the form of construction-related employment, as well as long-term benefits that include increased permanent employment and tax revenues. The following are the conclusions of the Economic and Fiscal Impact Assessment in Appendix H:

- Under the updated master plan, the subject development (including the Economic Opportunity Campus Area) will generate circa \$1.39 billion in capital investment into the island's economy. The construction of the Park and on-going operations/maintenance of the residences, on-site commercial and industrial/businesses, and community facilities, will provide an estimated 63,507 "worker-years" of employment and \$2.7 billion in total wages over a 19-year period. After "stabilization" the urban village community will support some 5,878 permanent jobs on-site with an annual payroll of about \$217 million, and an additional 1,469 workers with \$68.6 million in yearly wages off-site.
- The on-going business activity within the commercial and industrial/business park components will be substantial, both directly on-site and in stimulation of existing off-site companies. During the construction and absorption period, a total of \$6.2 billion in taxable sales/revenues are projected, averaging \$324.7 million per year. Following stabilization, \$557 million annually in business activity will be occurring in the community. The Economic Opportunity Campus Area



will contribute upwards of an estimated \$160 million per year in operating revenues to the MRTP, depending upon the ultimate use of the property.

- The majority of the gross operating revenues within the project, 92 percent, will be a result of outside patrons coming to the in-project companies. The base economic impact on Maui will total at least \$7.8 billion during build-out and \$903.9 million annually upon stabilization.
- The County of Maui will realize Real Property and Transient Accommodation taxes, and other secondary receipts and impact fees of \$141.3 million during the 19-year construction and absorption period, and \$28.5 million annually on a stabilized basis thereafter. The net benefit to the County purse will be in excess of \$25.3 million during development, and \$21.5 million annually on a stabilized basis.
- The State of Hawaii will receive Gross Excise, Income, Transient Accommodation taxes, secondary revenues, and impact fees of \$752.5 million during the build and sales projection time frame, and \$84.4 million per year thereafter. The net benefit to the State purse will be in excess of \$466.3 million during development, and a stabilized 'profit' of \$57.3 million per year.

The major economic impacts and public fiscal conclusions are shown on Table B of the Economic and Fiscal Impact Assessment in Appendix H. The column on the left summarizes the cumulative impacts during the initial 20-year construction and sales period, and the right hand column the annual impacts after stabilization. All figures include the Economic Campus Area where appropriate.

In summary, the Master Plan Update responds to the most current trends in the development of innovation centers nationwide. The Master Plan Update will strengthen Maui's economy by making the MRTP a more attractive location for knowledge-based industries. These industries will create high paying jobs for residents, which will in turn have a positive impact on the rest of the Maui economy. The result will be an increase in economic activities and employment opportunities on the neighbor islands consistent with community needs and desires, which will promote increased opportunities for Hawaii.



4. Cultural Resources

Existing Conditions. Hana Pono, LLC prepared a Cultural Impact Assessment (CIA) for the MRTP (See: Appendix E) to identify traditional customary practices within and in the vicinity of the MRTP site. The CIA was conducted in accordance with the State of Hawaii Office of Environmental Quality Control (OEQC) guidelines for Assessing Cultural Impact Assessments.

The MRTP site is located in the Kula Moku and the Waiohuli and Keokea ahupua'a, Wailuku (Kula) District. This area is located in what is known as a transitional area or "Barren Zone". The barren zone is an intermediary zone that provides access between coastline/beach areas to upland forests. Based on general archaeological and historical research, the barren zone was not subject to permanent or expansive population due to the lack of productive natural resources (water, soil, etc.). The existing gulches did not start directly from the top of Haleakala, and therefore the drainage way was shallow compared to other gulches - indicating limited water flow through the Waiohuli and Wailuku/Kula District. Since the lack of water did not attract large groups of residents to build communities like those found in other areas of Maui, pre-contact activity was limited.

Cattle grazing activities were present in Kula prior to the 1840's. By the 1880's, large sections of land were leased for cattle grazing, especially in lower Kula. The MRTP property has been used for cattle grazing for the last 150 years.

Interviews with 12 individuals (*kapuna/makua*) knowledgeable about the lands of the Waiohuli and Keokea ahupua'a were conducted in 2006 by Keli'i Tau'a and Kimokeo Kapahulehua of Hana Pono LLC as part of the CIA. The oral history interviews were conducted in order to collect information on possible pre-historic and historic cultural resources associated with these lands, as well as traditional cultural practices. The complete transcript of all interviews is provided in Appendix E "Cultural Impact Assessment Report").

- Douglas Wayne "Butch" Akina was born in 1943. He is a Kihei resident and currently owns and operates Akina, a transportation services company.



-
- Michael J. Boteilho was born in 1951 and was raised in Kula where he was active in cattle ranching as a youth upcountry.
 - Mary Carvalho was born in Nahiku in 1918 and moved to Kihei in 1949. Her nephew is former mayor Elmer Carvalho and she is knowledgeable the development of Kihei over the last 60 years.
 - Edward Quai Ying “Papa” Chang Jr. was born in 1932 and is a past president of the Kukahiko Corp, a group of remaining heirs to the Kukahiko Estates which has Kukahiko property in the Makena Landing Area.
 - Bonnie Herbert is a teacher of Hawaiian Studies at Kamali’i in Kihei. Her family has lived in Kihei since 1920.
 - Hamby Kahawai was born in 1937. Her daughter is Bonnie Herbert.
 - Kevin Mahealani Kai’okamalie was born in Keokea and raised in Honoua’ula. He has extensive knowledge of Hawaiian Culture and biology, specifically plants.
 - Paula Kalanikau was born in 1938. She has lived in Kihei since the early 1960’s.
 - Robert Pahia was born in 1956. He operates a small farm at the Kula Agricultural Park that specializes in Taro cultivation. He is also an agricultural consultant for taro farmers.
 - Henry Rice was born in 1938 and grew up on Kaonoulu Ranch. His grandfather bought the Kaonoulu ahupua’a in 1915 from the Cornwell family. Currently Henry is in charge of Kaonoulu Ranch.
 - Henry Silva was born in 1936 and has worked in cattle ranching for several ranches on Maui.
 - Alexa Vaught was born in 1941 and has lived in Kihei since 1971. She was a teacher in Hawaiian Studies for the Department of Education in the Kupuna Program and has a vast knowledge of Hawaiian Culture and hula.



Potential Impacts and Mitigation Measures. The CIA reports that there were no visible cultural resources, i.e. medicinal plants, shoreline resources, religious sites, or archeological resources observed on the property. From a cultural practices and beliefs perspective, the subject property bears no apparent signs of cultural practices or gatherings currently taking place. The oral history interviews did not reveal any known gathering places on the subject property or any access concerns as a result of the proposed project. Therefore it can be concluded that development of the site will not impact cultural resources on the property or within its immediate vicinity as mandated by Article XII, Section 7, of the Hawaii State Constitution. To assure the cultural integrity of the project, a qualified cultural specialist should participate in various cultural related activities. Activities would include the development and implementation of cultural orientation for construction personnel, advice concerning inadvertent finds and related protocol, and any other cultural concerns during the length of the project.

C. PUBLIC SERVICES

1. Recreational Facilities.

Existing Conditions. There are approximately 10.51 acres of sub-regional park land per 1,000 residents in the Kihei-Makena area.¹¹ Sub-regional parks include mini-, neighborhood, and district/community parks. Most parks within the area are located along the coast, and are mainly beach parks with few recreational facilities. Phase I of the South Maui Community Park which is located just across Piilani Highway from the MRTP, was recently completed and opened, significantly adding to Kihei's inventory of regional park acreage.

The following County public parks and community centers are currently available in the region:

- South Maui Community Park, Phase I;

¹¹ Chris Hart & Partners, Inc. April 2011. *Level-of-Service Analysis and Alternative Financing Study*. Prepared for County of Maui Long-Range Planning Division.



- Charley Young Park;
- Cove Park;
- Hale Piilani Park;
- Haycraft Park;
- Kalama Park;
- Kalepolepo Park;
- Kamaole Beach Park (I, II, III);
- Kenolio Recreation Complex;
- Keonekai Park;
- Kihei Aquatic Center;
- Kihei Beach Reserve / Waipuilani Park;
- Kihei Community Center;
- Kilohana Park;
- Mai Poina Park / Maipoina OE IAU Beach Park;
- Piikea Park; and
- Poolenalena Park / Chang's Beach.

In addition to County parks, Makena State Park is located in the Kihei-Makena region, encompassing 164-acres of scenic beach park. Numerous recreational facilities, including golf courses and tennis courts, are also present within the region's private hotels.

Potential Impacts and Mitigation Measures. A number of existing park facilities, including South Maui Community Park, Kihei Aquatic Center, Kihei Community Center, Kalama Park, Cove Park, and Charley Young Park are within close proximity to the project site.

On-site parks will include mini- and neighborhood parks, and open space, totaling ~~46.5~~ 88.7 acres. This equates to ~~16.87~~ 32.18 acres of park land per 1,000 project population. The proposed project will be providing a higher level-of-service than the existing conditions in the region. In addition, the owners of the project will comply with the requirements for Parks and Playgrounds, pursuant to Maui County Code Section 18.16.320. The park assessment requirements are designed to mitigate the incremental impact that new development places upon the region's park facilities. As such, the Project is not anticipated to significantly impact recreational facilities.



2. Medical Facilities

Existing Conditions. Maui Memorial Medical Center, located in Wailuku and approximately 10 miles from the MRTP, is the island's only acute care hospital. This 240-bed facility provides acute, general, and emergency care services. Various private medical offices and facilities are located in the South Maui area including Kihei Clinic and Wailea Medical Service, Kihei Pediatric Clinic, Kihei Physicians, the Kihei-Wailea Medical Center, Maui Medical Group, and Kaiser Permanente.

Potential Impacts and Mitigation Measures. The Project will produce an increase in the population of the immediate area. The increase in population will produce a marginal increase in demand for physicians, dentists, nurses, mental health personnel, and hospital beds. In the context of the overall population growth for the island, the proposed project will not produce an overall significant impact to the island's medical facilities.

The Park's commercial areas will provide the opportunity for medical services, such as medical and dental offices, medical clinics, hospitals, and long term care facilities to be developed within the project site to serve the community and neighboring areas.

3. Police and Fire Protection Services

Existing Conditions. The Maui Police Department is headquartered at the Wailuku Police Station on Mahalani Street. The MRTP falls within the Maui Police Department's Kihei Patrol District 6 (Ma'alaea, Kihei, Wailea, Makena). This police district is served by the Kihei Station, located approximately 2.5 miles from the MRTP at the Kihei Town Center. Two small offices are also located at Wailea Point between Kama'ole Beach Parks II and III and at the old Kihei Community Center.

According to the Maui Police Department, currently the Kihei Police District is commanded by one Police Captain, who is assisted by one Police Lieutenant and one Civilian Clerk. Staffing for the Kihei District Station includes seven Police Sergeants who supervise 30 Police Officer positions, three Community Police Officer positions, and two Visitor Oriented Police Officer positions and one School Resource Officer position. There are also six Public Safety Aides (civilian employees).



~~Planned for the near future is the~~ The new Kihei District Police Station is under construction at the intersection of Piilani Highway and Ke Alii Alanui Road, approximately 1.5 miles south of the MRTP. This full service police station will replace the current station at Kihei Town Center.

There are two fire stations servicing South Maui; Wailea Fire Station and Kihei Fire Station. The Kihei Fire Station is located near Kalama Park on South Kihei Road, about 1.5 miles from the MRTP, sufficiently proximate to provide adequate fire service to the site.

Potential Impacts and Mitigation Measures. The Project will produce an increase in the population of the immediate area. The increase in population will produce a marginal increase in demand for police and fire protection services, including personnel, vehicles, and facilities. According to the *Maui County Public Facilities Assessment Update* (R.M. Towill Corporation, 2007) the Maui Police Department's generation rate for officers per 1,000 population is 1.96, and the generation rate for total employees per 1,000 population is 2.56. Using these generation rates the proposed project will generate the need for 5.40 additional officers and 7.06 additional total employees.

Increased tax revenues generated by the project will provide additional funds to the County for police and fire capital facility improvements and service upgrades. Additionally, the Project will comply with any impact fee ordinances for police and fire that may be adopted.

4. Schools

Existing Conditions. Maui schools are organized into complexes and complex-areas. A complex consists of a high school and all of the intermediate/middle and elementary schools that flow into it. Groups of two to four complexes form a "complex area" that is under the supervision of a complex area superintendent.

The MRTP is located within the State Department of Education's (DOE) Maui Complex, within the Baldwin-Kekaulike-Maui Complex-Area. The Maui Complex is composed of the following schools:

Elementary Schools

- Kahului Elementary



- Kihei Elementary
- Lihikai Elementary
- Kamalii Elementary
- Pomaikai Elementary

Intermediate Schools

- Lokelani Intermediate
- Maui Waena Intermediate

High Schools

- Maui High

Current and projected enrollment and capacities for area schools are given in Table 4, “DOE School Enrollment & Capacity” below.

Table 4, DOE School Enrollment & Capacity

| Schools | 2010-2011-2012 Enrollment | 2009-2010 Capacity | 2016-2017 Projected Enrollment |
|-------------------------|---------------------------|--------------------|--------------------------------|
| Kahului Elementary | 986 | 963 | 991 1031 |
| Kihei Elementary | 920 | 923 | 926 966 |
| Lihikai Elementary | 971 | 1072 | 996 |
| Kamalii Elementary | 638 | 809 | 646 666 |
| Pomaikai Elementary | 655 | 885 | 580 717 |
| Lokelani Intermediate | 597 | 808 | 595 635 |
| Maui Waena Intermediate | 1084 | 909 | 1197 |
| Maui High | 1826 | 1701 | 1755 1855 |

Currently, the State DOE is planning to build a new high school for grades 9-12 in Kihei on approximately 77 acres mauka of Piilani Highway between Kulanihakoi and Waipuilani Gulches, north of the MRTP. Phase I is slated to open in 2016 with a design capacity of 930 students, staff and visitors and Phase II is planned to open in 2025 with a design capacity of 1,941.



Additionally, Kihei Charter School which provides K through 12 education, 2011-12 enrollment was 509 students. ~~546 students.~~

Potential Impacts and Mitigation Measures.

~~In addition, in 2007, the Hawaii Legislature enacted Act 245 as Section 302A, HRS, "School Impact Fees". Based upon this legislation, the Department of Education has enacted impact fees for residential developments that occur within indentified school impact districts. The Project is within the boundaries of the Central Maui Impact District and is within the Makawao Cost Area of that district. Projects within the district and cost area pay a construction fee and either a fee in lieu of land or a land donation, at the DOE's discretion. At the appropriate time, the applicant will contact the DOE to enter into an impact fee agreement.~~

In response to comments from the DOE the applicant will comply with all applicable impact fees. In 2007, the Hawaii Legislature enacted Act 245 as Section 302A, HRS, "School Impact Fees". Based upon this legislation, the Department of Education has enacted impact fees for residential developments that occur within indentified school impact districts. The Project is within the boundaries of the Central Maui Impact District and is within the Makawao Cost Area of that district. Projects within the district and cost area pay a construction fee and either a fee-in-lieu of land or a land donation, at the DOE's discretion. At the appropriate time, the applicant will contact the DOE to enter into an impact fee agreement.

Using State of Hawaii, DOE multipliers for standard housing types of school aged children, the proposed project could increase the student population of the affected schools by approximately:

Table 5, Projected Increase in Student Population

| Grade | Students |
|--------------|-----------------|
| Elementary | 238 |
| Intermediate | 103 |
| High | 138 |



The Project is being designed to accommodate a public and/or private elementary or intermediate school campus within the Village Center. The site will include sufficient land area for buildings, playgrounds and play fields to be used for informal, or non-regulation, soccer and baseball and will be within a short, five minute walk of most of the projects residential neighborhoods. The civic site, which would also conceptually include charter or private schools, was included in the project by the project master planner, Calthorpe Associates. The civic use site on the illustrative plan is 10.1 Acres in size, and located in the heart of the mixed use center. Civic activities such as schools or other civic uses are an important component of our master plan for a community of innovation. The Applicant is aware that providing a school campus would not automatically meet the land requirements of the DOE's Central Maui Impact District.

While both the applicant and the Department of Education acknowledge the wish for direct pedestrian and bicycle access between the Project and the future Kihei High School, The type and timing of connection is uncertain at this time. A direct route of access for bicycles and pedestrians is being considered in the Waipuilani gulch area near Piilani highway. The applicant has discussed pedestrian and bicycle connectivity options with the Department of Education team assigned to the future Kihei High School and we have agreed to keep in close contact as plans for the High School are made. The applicant will work with the Department of Education, the owner of Waipuilani Gulch, and other government and community stakeholders towards resolving the issue of pedestrian connectivity.

5. Solid Waste

Existing Conditions. Weekly, residential solid-waste collection in the area is provided by the County of Maui, Department of Environmental Management (DEM), Solid Waste Division. The Department's Residential Collection program collects and disposes of residential waste in three major districts: Wailuku (including Kahului and South Maui), Makawao (including Kula, Pukalani, Paia, and Haiku) and Lahaina (West Maui).

The Central Maui Landfill, which is located in the Wailuku-Kahului Community Plan region, receives residential solid waste from the area. Green waste is collected by Eko



Compost, which is located at the Central Maui Landfill. Construction and demolition (C&D) waste is accepted at the privately operated C&D Landfill in Ma`alaea.

Plastic, glass, metal, cardboard, and newspaper can be recycled when left at various drop-boxes throughout the County. Green waste recycling is provided by several private organizations. Since 2000, approximately 30 percent of the solid waste generated annually in Maui County is diverted by means of recycling, reuse, and composting. The County is targeting a 50 percent waste diversion rate by 2030.¹²

Potential Impacts and Mitigation Measures. In the Public Facilities Assessment Update County of Maui (2007), R.M. Towill Corporation projected that the Central Maui Landfill will have adequate capacity to accommodate residential and commercial waste through the year 2025. This projection was arrived at by multiplying Maui County's de facto population projections by an estimated number of pounds per person per day of waste generated, and assumes that solid waste generated by commercial and industrial growth will be captured by a corresponding trend in projected population growth. This estimate does not take into account future increases in source reduction and waste diversion. Increases in waste diversion achieved through education, recycling, composting, and reuse programs are expected to decrease demand for landfill space and extend the life of the Central Maui Landfill beyond the currently projected closure date. The County's DEM, Solid Waste Division anticipates that additional phases of the Central Maui Landfill will be developed as needed to accommodate future waste.

Waste generated by site preparation will primarily consist of vegetation, rocks, and debris from clearing, grubbing, and grading. Very little demolition material is expected, as the site is essentially vacant.

During the short term, construction activities will require the disposal of the existing on-site waste, as well as cleared vegetation and construction-related solid waste. A solid waste management plan will be coordinated with the County's Solid Waste Division for the disposal of onsite and construction-related waste material. The applicants will work with the contractor to minimize the amount of solid waste generated during the construction of the project.

¹² R.M. Towill Corporation. March 2007. *Public Facilities Assessment Update County of Maui*. Prepared for County of Maui Planning Department.



The County's DEM, Solid Waste Division estimates that residential households on Maui generate approximately 2.3 tons of solid waste per household per year. Commercial units on Maui generate approximately 1.58 tons of solid waste per employee per year.¹³ Solid waste generation includes all the waste produced in a residence or business, including that which is reused or recycled as well as that which is disposed of in landfills.

Using the above rates, after full build-out and occupancy of all residential units and commercial units at the project site, total waste generated is estimated to be approximately 11,653 tons per year. Using the County's waste diversion rate of 30 percent, total waste from the project site is estimated to be approximately 8,157 tons per year. Achieving the County's waste diversion rate of 50 percent by 2030 would reduce the Project's waste to 5,827 tons per year.

The Master Plan Update will support the County's recycling, reuse, and composting activities. The County of Maui Integrated Solid Waste Management Plan (2009) provides strategies for diverting solid waste from landfills to reduce landfill dependency, save landfill capacity and improve operational efficiency. The MRTP will implement these strategies by providing options for recycling, such as collection systems and bin space, within the Park, and promoting sound recycling practices among residents and businesses.

6. Civil Defense

Existing Conditions. The State of Hawaii Civil Defense recently installed a new emergency siren at the Kihei Community Center which provides coverage for a majority of the MRTP.

Potential Impacts and Mitigation Measures. In response to comments from DBEDT LUC, and Civil Defense the Applicant will take into consideration the recommendation to incorporate hardening measures for safe rooms within planned residential facilities and community facilities so as to withstand high-wind and seismic events. Additionally, as requested in the letter, the Applicant will install one (1) Omni 121 db(c) direc-

¹³ Gershman, Brickner & Bratton, Inc. February 2009. *Integrated Solid Waste Management Plan*. Prepared for County of Maui Department of Environmental Management Solid Waste Division.



tional siren on the northeast section of the Maui Research and Technology Park. (See: Table 28).

D. INFRASTRUCTURE

1. Roadways

A Traffic Impact Analysis Report (TIAR) was prepared by Parsons Brinkerhoff, Inc. which describes the traffic characteristics of the proposed project and likely impacts to the adjacent roadway network. As part of the revised TIAR for the Final EIS, four (4) scenarios were analyzed for Phases 1 and 2 of the project as a result of comments from the Department of Transportation (HDOT) and Ms. Victoria Huffman.

Scenario 1 - No Build. The No Build scenario represents the background conditions without the MRTP development scenario. Only existing roadways and those roadways committed by other developments, the State, and the County are included.

Scenario 2- Build. The Build scenario adds MRTP development generated trips to the No Build scenario. The assumed roadway network is the same as in the No Build scenario.

Scenario 3- Build with MRTP Roadway Improvements. This scenario represents the Build scenario with additional transportation improvements committed by the MRTP.

Scenario 4 - Build with MRTP and Regional Roadway Improvements. The final scenario represents the Build with MRTP Roadway Improvements with other needed regional transportation improvements in the analysis year (2024 for Phase 1 and 2034 for Phase 2). (See: Appendix G, "Traffic Impact Analysis Report").

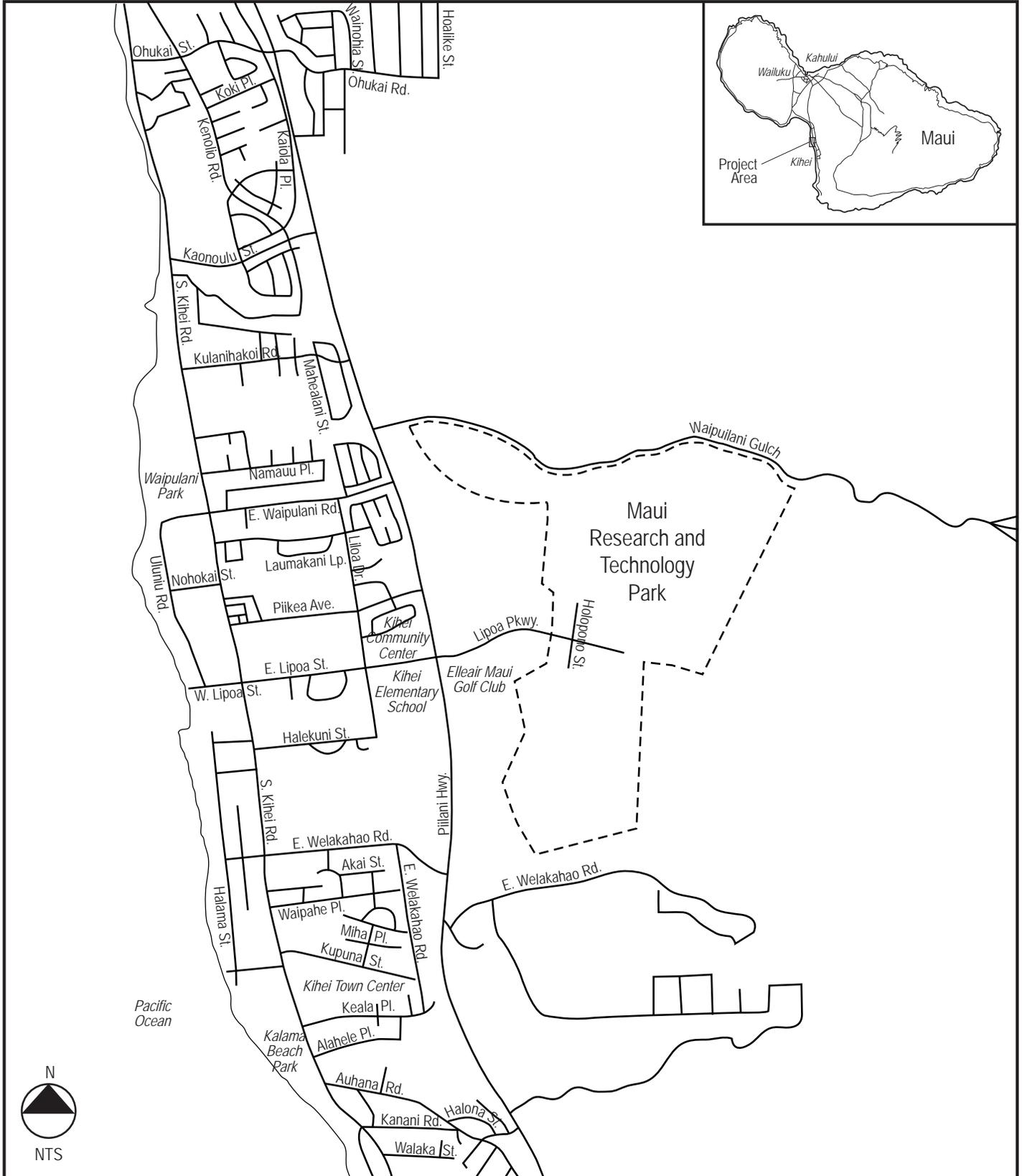
The Applicant will work with HDOT to submit another revised TIAR prior to zone change approval. The Applicant will comply with the Hawaii State and the Maui County standard to make necessary revisions to the TIAR.

Existing Roadway System. Piilani Highway provides primary regional and sub-regional access to the MRTP study area. Within the study area, Lipoa Parkway/Lipoa Street provides east-west traffic circulation, and Piilani Highway, South Kihei Road, and Liloa Drive provide north-south traffic circulation (See: Figure 34, "Vicinity Map").



Piilani Highway

Piilani Highway provides primary regional mobility for the Kihei and Wailea-Makena areas. Between Mokulele Highway to the north and Kilohana Drive to the south, Piilani Highway is a four-lane ~~major~~ principal arterial roadway. Further south between Kilohana Drive and Wailea Ike Drive, it is a two-lane major arterial roadway. Paved shoulders are provided along the entire length of Piilani Highway and exclusive, median left-turn lanes are provided at intersections. Many intersections also have exclusive right-turn deceleration lanes on Piilani Highway. Within the project study limits, Piilani Highway intersects Lipoa Parkway/Lipoa Street at a signalized intersection. Piilani Highway has a right-turn deceleration lane at the southbound approach and exclusive left-turn lanes at both south and northbound approaches. The posted speed limit on Piilani Highway is 40 miles per hour. In the study area, Piilani Highway forms signalized intersections at:



Vicinity Map

Figure

1



- Piikea Avenue
- Lipoa Parkway/Lipoa Street

Within the study area, Piilani Highway forms unsignalized T-intersections at:

- *Kaonoulu Street
- *Kulanihakoi Street
- East Waipuilani Road
- East Welakahao Road Street (north)
- Old Welakahao Road Street (south)

* The Kaonoulu and Kulanihakoi intersections along Piilani Highway were added to the study area as required by the HDOT because at these intersections traffic is projected to increase by 5% or more with the project.

South Kihei Road

South Kihei Road is a collector road providing north-south mobility and property access within the Kihei Community. It is generally a two-lane roadway. Major segments of South Kihei Road have been improved to provide either a median turn lane or parallel parking on the makai-side. Sidewalks were provided on these enhanced segments along with striped bike lanes. Unimproved sections of South Kihei Road usually have only two undivided traffic lanes. The posted speed limit on South Kihei Road is 25 miles per hour. Signalized intersections on South Kihei Road near the study area are:

- Piikea Avenue
- Lipoa Street
- East Welakahao Road

Lipoa Parkway/Lipoa Street

Mauka of Piilani Highway, Lipoa Parkway is a two-lane, undivided roadway providing access to MRTP and Elleair Golf Course. It is configured to allow for future expansion to a four-lane roadway with raised median. The Applicant acknowledges that additional improvements to the existing access for the Lipoa Parkway shall be subject to the review and approval from the HDOT.



Makai of Piilani Highway, the roadway is named Lipoa Street. It is configured as a two-lane roadway with a painted median for left-turn lanes. Between Piilani Highway and Liloa Street, there are two unsignalized, T-intersections at the driveways for the Kihei Recreation Center and Kihei Elementary School. The Lipoa Street/Liloa Street intersection is signalized with exclusive left-turn lanes provided at all approaches. The speed limits at both Lipoa Parkway and Lipoa Street are posted at 20 miles per hour.

Liloa Drive

Liloa Drive is part of the future North-South Collector in the Kihei area and is located approximately midway between Piilani Highway and South Kihei Road. Within the study area, just south of Lipoa Street, Liloa Drive is configured as a two-lane roadway with painted median, while north of Lipoa Street, Liloa Drive, has two lanes in the northbound direction and one lane in the southbound direction. North of Piikea Avenue, Liloa Drive reverts to a two-lane roadway. The posted speed limit on Liloa Drive is 20 miles per hour.

Piikea Avenue

Piikea Avenue is a collector roadway oriented in the mauka-makai direction. Piikea is four lanes between Piilani Highway and Liloa Drive and two lanes makai of Liloa. Piilani Village Shopping Center is located on the north side of Piikea Avenue between Liloa and Piilani. It provides access to the adjacent residential community and is part of the overall roadway network providing mobility in the Kihei area. Piikea Avenue's intersections with South Kihei Road and Piilani Highway are signalized. The intersection of Piikea and Liloa is ~~all-way stop sign controlled~~ a roundabout. The posted speed limit is 20 miles per hour.

~~The intersection of Piikea Avenue and Liloa currently operates as an unsignalized cross intersection with all-way stop control which will be replaced by is a roundabout which is under construction.~~

Vehicular Access to MRTP

In addition to Lipoa Parkway, there are two other points along Piilani Highway where access from MRTP is permitted, but a roadway connection has not yet been made. The first permitted-access point is located near the northern end of the MRTP project area, roughly opposite the East Waipuilani Road/ Piilani Highway intersection, where there is an existing 80 foot wide access permitted opening at Piilani Highway. MRTP has a 100-



foot wide access and utility easement across the Elleair Golf Course to this 80 foot wide highway access opening. The Applicant acknowledges that the proposed intersection may be allowed subject to review and approval of DOT prior to the approval of the change in zone and the 80-foot wide permitted vehicular access location must be validated with the DOT.

The second permitted-access is located at the southerly end of the project in the vicinity of the old Welakahao Road intersection with Piilani Highway. MRTP has a ~~64~~ 80- foot wide access and utility easement which extends from old Welakahao Road (in the vicinity of the Kihei Wastewater Reclamation Facility) and runs along the southerly side of the Elleair Golf Course over land currently owned by Haleakala Ranch Company³ to the southerly end of the MRTP. The Applicant acknowledges that the proposed intersection may be allowed subject to review and approval of DOT prior to the approval of the change in zone and the 80-foot wide permitted vehicular access location must be validated with the DOT.

Bicycle and Pedestrian Access

6-foot wide concrete sidewalks constructed along the existing streets in the Maui Research and Technology Park provide the current means of pedestrian access. A 6-foot wide concrete sidewalk along Lipoa Parkway provides an improved pedestrian access route from Piilani Highway to the MRTP, and 6-foot wide concrete sidewalks located along the existing portions of Holopono and Ninau Street provide pedestrians improved access to the rest of the existing MRTP development. No dedicated bicycle facilities currently exist, so bicycles now share the pavement with motor vehicles.

Public Transit

The island of Maui is served by the Maui Public Bus Transit System, operated by Maui County. Kihei is served by the Kihei Villager and Islander bus routes. The Kihei Villager route is the shorter of the two, serving Kihei and Maalaea. The Kihei Islander route extends further to the north and south, connecting Kahului to Makena via Maalaea and Kihei. Both routes operate with a headway of one hour throughout the day. Within Kihei, the Maui buses use South Kihei Road. Currently, the bus accesses MRTP twice a day.



Existing Traffic Volumes

Traffic turning movement counts were conducted at the following intersections from Tuesday, November 16 to Thursday, November 18, 2010 during the AM and PM peak hours at the following intersections:

- Piilani Highway/East Waipuilani Road
- Piilani Highway/Piikea Avenue
- Piilani Highway/Lipoa Street/Lipoa Parkway
- Piilani Highway/East Welakahao Road (~~north~~)
- Piilani Highway/~~East Old~~ Welakahao Road (~~south~~)
- South Kihei Road/Piikea Avenue
- South Kihei Road/Lipoa Street
- South Kihei Road/East Welakahao Road/West Welakahao Road
- Liloa Drive/Piikea Avenue
- Liloa Drive/Lipoa Street

The above intersection counts were supplemented with additional counts to satisfy comments from the HDOT.

- Piilani Highway/Kaonoulou Street
- Piilani Highway/ Kulanihakoi Street
- Liloa Drive/Piikea Avenue

The additional Piilani Highway counts were conducted on Tuesday November 15 to Wednesday November 16, 2012. The Liloa/Piikea intersection was counted on Tuesday January 8, 2013.

The AM and PM peak hours were found to occur from 7:15 to 8:15 AM and from 3:45 to 4:45 PM, respectively. Figure 3 of the “Traffic Impact Analysis Report” (TIAR), in Appendix F G, shows the existing peak hour traffic volumes for each turning movement at these intersections. The existing lane configurations are shown in Figure 4 of the TIAR in Appendix G. Existing traffic count data can be found in Appendix A of the TIAR (See: Appendix G, “Traffic Impact Analysis Report”).



The AM and PM peak hours were found to occur from 7:15 to 8:15 AM and from 3:45 to 4:45 PM, respectively. Figure 3 of the “Traffic Impact Analysis Report” (TIAR), in Appendix G, shows the existing peak hour traffic volumes for each turning movement at these intersections. The existing lane configurations are shown in Figure 4 of the TIAR in Appendix G. Existing traffic count data can be found in Appendix A of the TIAR (See: Appendix G, “Traffic Impact Analysis Report”).

Existing Intersection Operations

The intersections were analyzed using the methodologies for unsignalized and signalized intersections outlined in the 2000 *Highway Capacity Manual (HCM)*. Operating conditions at an intersection by approach are expressed as a qualitative measure known as Level of Service (LOS) ranging from A to F. LOS A represents free-flow operations with low delay, while LOS F represents congested conditions with relatively high delay. The overall intersection LOS is a weighted average of the LOS of individual traffic movement groups. Appendix B of the TIAR (See: Appendix G, “Traffic Impact Analysis Report”) has more detailed definitions of intersection LOS. Field observations were performed at selected intersections to verify the results of the intersection analyses. Table No. 6 displays the existing conditions level of service (LOS) for each intersection.

Table 6, Existing Level of Service

| Existing | AM | | PM | |
|--|----------------------------|------------------|----------------------------|------------------|
| | LOS | Delay | LOS | Delay |
| <u>Kaonoulu St & Piilani HWY</u> | <u>Unsignalized</u> | | <u>Unsignalized</u> | |
| <u>Piilani NB Left</u> | <u>C</u> | <u>17</u> | <u>C</u> | <u>18</u> |
| <u>Kaonoulu EB Left</u> | <u>F</u> | <u>*</u> | <u>F</u> | <u>*</u> |
| <u>Kaonoulu EB Right</u> | <u>E</u> | <u>40</u> | <u>C</u> | <u>25</u> |
| <u>Kulanihakoi St & Piilani HWY</u> | <u>Unsignalized</u> | | <u>Unsignalized</u> | |
| <u>Piilani NB Left</u> | <u>C</u> | <u>19</u> | <u>C</u> | <u>18</u> |
| <u>Kulanihakoi St EB Left</u> | <u>F</u> | <u>*</u> | <u>F</u> | <u>*</u> |
| <u>Kulanihakoi St ED Right</u> | <u>C</u> | <u>22</u> | <u>C</u> | <u>20</u> |
| <u>E. Waipuilani Rd & Piilani Hwy</u> | <u>Unsignalized</u> | | <u>Unsignalized</u> | |
| <u>E. Waipuilani EB Right</u> | <u>C</u> | <u>20</u> | <u>C</u> | <u>16</u> |
| <u>S. Kihei Rd & Piikea Ave</u> | <u>B</u> | <u>10</u> | <u>B</u> | <u>17</u> |
| <u>S. Kihei NB Left</u> | <u>A</u> | <u>8</u> | <u>A</u> | <u>10</u> |



| Existing | AM | | PM | |
|--------------------------------------|---------------------|-----------|---------------------|-----------|
| | LOS | Delay | LOS | Delay |
| S. Kihei NB Through | B | 12 | B | 19 |
| S. Kihei NB Right | A | 9 | B | 12 |
| S. Kihei SB Left | A | 5 | A | 10 |
| S. Kihei SB Through-Right | A | 7 | B | 11 |
| Piikea WB Left-Through | B | 17 | C | 27 |
| Piikea WB Right | B | 15 | B | 20 |
| Piikea Ave & Liloa Dr | Unsignalized | | Unsignalized | |
| Liloa NB Left | A | 9 | B | 10 |
| Liloa NB Through Right | B | 11 | B | 11 |
| Liloa SB Left | A | 10 | B | 10 |
| Liloa SB Through Right | B | 11 | B | 11 |
| Piikea EB Left | A | 9 | B | 10 |
| Piikea EB Through Right | B | 10 | B | 12 |
| Piikea WB Left | B | 11 | A | 9 |
| Piikea WB Through Right | B | 11 | C | 19 |
| Piikea Ave & Liloa Dr | A | 6 | A | 7 |
| Liloa NB Approach | A | 5 | A | 7 |
| Liloa SB Approach | A | 6 | A | 7 |
| Piikea EB Approach | A | 5 | A | 7 |
| Piikea WB Approach | A | 6 | A | 8 |
| Piikea Ave & Piilani Hwy | C | 22 | C | 26 |
| Piilani NB Left | E | 61 | D | 54 |
| Piilani NB Through | A | 9 | B | 11 |
| Piilani SB Through | C | 26 | D | 36 |
| Piilani SB Right | B | 16 | C | 24 |
| Piikea EB Left | D | 55 | E | 69 |
| Piikea EB Right | A | 1 | A | 1 |
| W. Lipoa St & S. Kihei Rd | B | 11 | B | 19 |
| S. Kihei NB Left | A | 8 | B | 11 |
| S. Kihei NB Through | B | 11 | B | 15 |
| S. Kihei NB Right | A | 8 | A | 10 |
| S. Kihei SB Left | A | 6 | A | 9 |
| S. Kihei SB Through-Right | A | 9 | C | 21 |



| Existing | AM | | PM | |
|--|----------|-----------|----------|-----------|
| | LOS | Delay | LOS | Delay |
| W. Lipoa EB Left-Through | B | 15 | C | 25 |
| W. Lipoa EB Right | B | 15 | C | 23 |
| W. Lipoa WB Left-Through | B | 16 | C | 31 |
| W. Lipoa WB Right | B | 15 | C | 24 |
| E. Lipoa St & Liloa Dr | B | 11 | A | 10 |
| Liloa NB Left | B | 16 | B | 11 |
| Liloa NB Through | B | 16 | B | 12 |
| Liloa NB Right | B | 14 | B | 11 |
| Liloa SB Left | B | 17 | B | 12 |
| Liloa SB Through | B | 16 | B | 12 |
| Liloa SB Right | B | 14 | B | 11 |
| E. Lipoa EB Left | A | 9 | A | 7 |
| E. Lipoa EB Through-Right | B | 11 | A | 9 |
| E. Lipoa WB Left | A | 5 | A | 7 |
| E. Lipoa WB Through | A | 7 | A | 10 |
| E. Lipoa WB Right | A | 7 | A | 8 |
| E. Lipoa St/Lipoa Pkwy & Piilani Hwy | C | 27 | C | 34 |
| Piilani NB Left | D | 47 | F | 128 |
| Piilani NB Through | C | 23 | C | 27 |
| Piilani NB Right | B | 16 | B | 15 |
| Piilani SB Left | E | 61 | E | 57 |
| Piilani SB Through | C | 26 | C | 28 |
| Piilani SB Right | B | 18 | B | 18 |
| E. Lipoa EB Left-Through | C | 35 | D | 38 |
| E. Lipoa EB Right | C | 25 | C | 26 |
| E. Lipoa WB Left-Through | C | 25 | C | 27 |
| E. Lipoa WB Right | C | 25 | C | 26 |
| E. Welakahao Rd & S. Kihei Rd | B | 11 | B | 14 |
| Kihei NB Left | A | 7 | A | 7 |
| Kihei NB Through-Right | B | 13 | B | 13 |
| Kihei SB Left | A | 7 | A | 7 |
| Kihei SB Through-Right | A | 9 | B | 11 |
| W. E. Welakahao EB Left-Through-Right | B | 13 | C | 24 |



| Existing | AM | | PM | |
|--|---------------------|-------|---------------------|-------|
| | LOS | Delay | LOS | Delay |
| E. Welakahao WB Left-Through | B | 14 | C | 34 |
| E. Welakahao WB Right | B | 12 | C | 23 |
| E. Welakahao Rd (north) & Piilani Hwy | Unsignalized | | Unsignalized | |
| Piilani NB Left | B | 14 | B | 14 |
| E. Welakahao EB Left | E | 47 | F | 223 |
| E. Old Welakahao Rd (south) & Piilani Hwy | Unsignalized | | Unsignalized | |
| Piilani SB Left | B | 11 | B | 13 |
| E. Old Welakahao WB Left-Right | C | 22 | D | 25 |

NB- northbound, SB- southbound, EB- eastbound, WB- westbound
 Delay expressed in seconds per vehicle.

* Delay greater than 300 seconds per vehicle.

Summary of Results

Overall the study area intersections operate well in the existing condition with a couple of exceptions. At the intersection of Piilani Highway and Piikea Avenue, the southbound Piilani through operates at LOS D and some of the existing movements operate at LOS E. The ~~north~~ East Welakahao intersection with Piilani Highway operates at LOS F during the PM peak hour. The South Kihei Road and Liloa corridors operate well.

Year 2024 Traffic Conditions

Phase 1 of the MRTP project is projected to be completed in the Year 2024, which was used as the basis for future traffic analysis. As previously mentioned four scenarios, including Scenario 1 - No Build, Scenario 2 - Build, Scenario 3 - Build with MRTP Roadway improvements, and Scenario 4 - Build with MRTP and regional roadway improvements, were analyzed.

Without Project No Build Scenario 1

In order to assess the impact of Phase 1, Year 2024 was analyzed without project. The No Build scenario represents the background conditions without MRTP development scenario. Only existing roadways and those roadways committed by other developments, the State, and the County are included.



Future Roadways and Transit

Using the 2003 Kihei Traffic Master Plan as a resource, it is assumed that the north-south collector roadway (an extension of the existing Liloa Drive) would be in place by 2024 due to its presence in the six-year Capital Program. Liloa Drive would provide additional mobility throughout the Kihei area and is necessary to divert traffic from Piilani Highway. For the purpose of this study, it is assumed that the northern terminus will be Kaonoulu Street and the southern terminus will be Kanani Road.

It is assumed that the Maui Bus system will continue operations within the Kihei area with multiple routes at a frequency of one per hour.

Projected Year 2024 Background Traffic

The Year 2024 background traffic volumes were derived using existing traffic along with trip generation obtained from the Maui Travel Demand Forecasting Model. The future Year 2024 background traffic assumes the presence of the following developments:

- Kihei High School
- Piilani Promenade
- Downtown Kihei
- Maui Lu Resort
- Kenolio 6
- Kaiwahine Village
- A&B N. Kihei Residential
- Honua'ula
- Wailea Resort
- Makena Resort

The projected Year 2024 background traffic volumes are shown in Figure 5 of the TIAR (See: Appendix G, "Traffic Impact Analysis Report").

Projected Year 2024 ~~Traffic Operations without the Project~~ No Build Scenario 1

Level of Service analysis was performed on the study area intersections for scenario 1. These results are shown in Table 2 of the TIAR in Appendix G and in Table ~~6~~ 7 below. Synchro 8 was used to analyze the roundabout at Liloa Drive/Piikea Avenue due to updated HCM 2010 standards.



As shown in Table 7 below, the eastbound right turn at the intersection of Piilani Highway and East Waipuiani is projected to operate at LOS C D during the AM and PM peak hours.

The intersection of South Kihei Road and Piikea Avenue is projected to operate at ~~LOS B-A~~ overall during the AM peak hour and LOS B during the PM peak hours. All movements are projected to operate at LOS B C or better during the AM peak hour and at ~~LOS C or better during the~~ PM peak hour.

The existing configuration of the intersection of Liloa Drive and Piikea Avenue is an ~~un-signalized, all-way stop-controlled intersection. This all-way stop control will be replaced by a roundabout, which is currently under construction~~ roundabout. As a roundabout, all movements operate ~~the intersection is projected to operate at~~ LOS C A during the AM ~~peak hour. During the~~ and PM peak hour. ~~the intersection is projected to operate at~~ LOS D.

The intersection of Piilani Highway and Piikea Avenue is projected to operate at LOS C during the AM peak hour and LOS ~~D~~ E during the PM peak hour. The northbound Piilani left turn to Piikea is projected to operate at LOS F and the eastbound Piikea left turn to Piilani is projected to operate at LOS ~~E~~ F during the AM and PM peak hours. For the purpose of this analysis, the existing cycle length was used, which contributes to the intersection's overall delay.

The intersection of South Kihei Road and Lipoa Street is projected to operate at LOS B during ~~both~~ the AM peak hour and LOS C during the PM peak hours. All movements operate at LOS B or better during the AM peak hour and at LOS C D or better during the PM peak hour.

The intersection of Liloa Drive and Lipoa Street is projected to operate at LOS B during the AM peak hour and LOS C A during the PM peak hour. All movements are projected to operate at LOS B or better during the AM and PM peak hours. ~~During the PM peak hour, the north and southbound through movements are projected to operate at LOS C and LOS D, respectively.~~ The intersection appears to be fully actuated currently. The signal may need to be adjusted to provide a longer cycle length to accommodate additional north-south through traffic.



Table 7, Projected Year 2024 Level of Service without Project

| 2024 background | AM | | PM | |
|---|---------------------|-----------|---------------------|-----------|
| | LOS | Delay | LOS | Delay |
| E. Waipuilani Rd & Piilani Hwy | Unsignalized | | Unsignalized | |
| E. Waipuilani EB Right | C | 24 | C | 17 |
| S. Kihei Rd & Piikea Ave | B | 10 | B | 16 |
| S. Kihei NB Left | A | 8 | A | 10 |
| S. Kihei NB Through | B | 12 | B | 18 |
| S. Kihei NB Right | A | 8 | B | 11 |
| S. Kihei SB Left | A | 5 | B | 10 |
| S. Kihei SB Through Right | A | 7 | B | 10 |
| Piikea WB Left Through | B | 17 | C | 28 |
| Piikea WB Right | B | 15 | C | 21 |
| Piikea Ave & Liloa Dr | B | 12 | D | 29 |
| Liloa NB Approach | B | 10 | D | 31 |
| Liloa SB Approach | C | 11 | D | 27 |
| Piikea EB Approach | A | 11 | B | 14 |
| Piikea WB Approach | B | 16 | E | 37 |
| Piikea Ave & Piilani Hwy | C | 29 | D | 36 |
| Piilani NB Left | F | 115 | F | 83 |
| Piilani NB Through | B | 11 | B | 17 |
| Piilani SB Through | C | 31 | D | 47 |
| Piilani SB Right | B | 18 | C | 34 |
| Piikea EB Left | E | 79 | E | 78 |
| Piikea EB Right | A | 1 | A | 1 |
| W. Lipoa St & S. Kihei Rd | B | 12 | B | 18 |
| S. Kihei NB Left | A | 9 | B | 12 |
| S. Kihei NB Through | B | 12 | B | 13 |
| S. Kihei NB Right | A | 9 | A | 9 |
| S. Kihei SB Left | A | 5 | A | 9 |
| S. Kihei SB Through Right | A | 8 | B | 20 |
| W. Lipoa EB Left Through | B | 18 | C | 25 |
| W. Lipoa EB Right | B | 17 | C | 24 |
| W. Lipoa WB Left Through | B | 19 | C | 31 |
| W. Lipoa WB Right | B | 18 | C | 24 |

Maui Research & Technology Park



| 2024 background | AM | | PM | |
|--|---------------------|-----------|---------------------|-----------|
| | LOS | Delay | LOS | Delay |
| E. Lipoa St & Liloa Dr | B | 14 | C | 26 |
| Liloa NB Left | B | 14 | B | 10 |
| Liloa NB Through | B | 18 | C | 26 |
| Liloa NB Right | B | 14 | A | 10 |
| Liloa SB Left | B | 16 | B | 11 |
| Liloa SB Through | B | 16 | D | 48 |
| Liloa SB Right | B | 14 | B | 10 |
| E. Lipoa EB Left Through | B | 13 | B | 13 |
| E. Lipoa EB Right | B | 17 | B | 15 |
| E. Lipoa WB Left | A | 7 | A | 9 |
| E. Lipoa WB Through | B | 11 | B | 13 |
| E. Lipoa WB Right | B | 10 | B | 11 |
| E. Lipoa St/Lipoa Pkwy & Piilani Hwy | C | 34 | D | 37 |
| Piilani NB Left | E | 69 | E | 55 |
| Piilani NB Through | C | 29 | C | 30 |
| Piilani NB Right | B | 19 | B | 18 |
| Piilani SB Left | E | 56 | E | 57 |
| Piilani SB Through | C | 32 | D | 39 |
| Piilani SB Right | C | 21 | C | 27 |
| E. Lipoa EB Left Through | D | 51 | D | 50 |
| E. Lipoa EB Right | C | 31 | C | 30 |
| E. Lipoa WB Left Through | C | 31 | C | 31 |
| E. Lipoa WB Right | C | 31 | C | 30 |
| E. Welakahao Rd & S. Kihei Rd | B | 10 | B | 16 |
| S. Kihei NB Left | A | 6 | A | 8 |
| S. Kihei NB Through-Right | B | 10 | B | 14 |
| S. Kihei SB Left | A | 6 | A | 8 |
| S. Kihei SB Through-Right | A | 8 | B | 13 |
| E. Welakahao EB Left Through-Right | B | 17 | C | 25 |
| E. Welakahao WB Left Through | B | 18 | D | 37 |
| E. Welakahao WB Right | B | 16 | C | 24 |
| E. Welakahao Rd (north) & Piilani Hwy | Unsignalized | | Unsignalized | |
| Piilani NB Left | C | 16 | B | 12 |



| 2024 background | AM | | PM | |
|--|---------------------|-------|---------------------|-------|
| | LOS | Delay | LOS | Delay |
| E. Welakahao EB Left | F | 94 | F | 95 |
| E. Welakahao Rd (south) & Piilani Hwy | Unsignalized | | Unsignalized | |
| Piilani SB Left | B | 11 | B | 13 |
| E. Welakahao WB Left Right | D | 28 | C | 23 |

NB northbound, SB southbound, EB eastbound, WB westbound
 Delay expressed in seconds per vehicle.

Table 7, Year 2024 No Build Level of Service Scenario 1

| Scenario 1 | AM | | PM | |
|---|----------|-----------|----------|------------|
| | LOS | Delay | LOS | Delay |
| Kaonoulu St & Piilani Hwy | <u>C</u> | <u>24</u> | <u>E</u> | <u>74</u> |
| Piilani NB Left | <u>E</u> | <u>67</u> | <u>F</u> | <u>164</u> |
| Piilani NB Through | <u>C</u> | <u>20</u> | <u>F</u> | <u>92</u> |
| Piilani NB Right | <u>B</u> | <u>11</u> | <u>C</u> | <u>29</u> |
| Piilani SB Left | <u>D</u> | <u>52</u> | <u>F</u> | <u>139</u> |
| Piilani SB Through | <u>C</u> | <u>22</u> | <u>D</u> | <u>36</u> |
| Piilani SB Right | <u>A</u> | <u>9</u> | <u>B</u> | <u>16</u> |
| Kaonoulu EB Left | <u>D</u> | <u>51</u> | <u>E</u> | <u>56</u> |
| Kaonoulu EB Through | <u>E</u> | <u>57</u> | <u>F</u> | <u>84</u> |
| Kaonoulu EB Right | <u>A</u> | <u>0</u> | <u>A</u> | <u>0</u> |
| Kaonoulu WB Left | <u>D</u> | <u>52</u> | <u>F</u> | <u>142</u> |
| Kaonoulu WB Through | <u>D</u> | <u>53</u> | <u>E</u> | <u>65</u> |
| Kaonoulu WB Right | <u>D</u> | <u>50</u> | <u>D</u> | <u>53</u> |
| Kulanihakoi St & Piilani Hwy | <u>C</u> | <u>28</u> | <u>C</u> | <u>25</u> |
| Piilani NB Left | <u>E</u> | <u>64</u> | <u>E</u> | <u>71</u> |
| Piilani NB Through | <u>C</u> | <u>26</u> | <u>C</u> | <u>22</u> |
| Piilani NB Right | <u>A</u> | <u>0</u> | <u>A</u> | <u>0</u> |
| Piilani SB Left | <u>E</u> | <u>66</u> | <u>E</u> | <u>61</u> |
| Piilani SB Through | <u>C</u> | <u>27</u> | <u>C</u> | <u>25</u> |
| Piilani SB Right | <u>A</u> | <u>0</u> | <u>A</u> | <u>0</u> |
| Kulanihakoi EB Left-Through | <u>D</u> | <u>46</u> | <u>D</u> | <u>50</u> |

Maui Research & Technology Park



| | | | | |
|--|----------------------------|-----------------|----------------------------|------------------|
| <u>Kulanihakoi EB Right</u> | <u>A</u> | <u>0</u> | <u>A</u> | <u>0</u> |
| <u>Kulanihakoi WB Left-Through</u> | <u>E</u> | <u>69</u> | <u>E</u> | <u>60</u> |
| <u>Kulanihakoi WB Right</u> | <u>A</u> | <u>0</u> | <u>A</u> | <u>0</u> |
| <u>E. Waipuilani Rd & Piilani Hwy</u> | <u>Unsignalized</u> | | <u>Unsignalized</u> | |
| <u>E. Waipuilani EB Right</u> | <u>D</u> | <u>27</u> | <u>C</u> | <u>20</u> |
| <u>S. Kihei Rd & Piikea Ave</u> | <u>A</u> | <u>9</u> | <u>B</u> | <u>18</u> |
| <u>S. Kihei NB Left</u> | <u>A</u> | <u>7</u> | <u>A</u> | <u>9</u> |
| <u>S. Kihei NB Through</u> | <u>B</u> | <u>10</u> | <u>C</u> | <u>20</u> |
| <u>S. Kihei NB Right</u> | <u>A</u> | <u>7</u> | <u>B</u> | <u>11</u> |
| <u>S. Kihei SB Left</u> | <u>A</u> | <u>5</u> | <u>B</u> | <u>12</u> |
| <u>S. Kihei SB Through-Right</u> | <u>A</u> | <u>6</u> | <u>B</u> | <u>10</u> |
| <u>Piikea WB Left-Through</u> | <u>C</u> | <u>21</u> | <u>C</u> | <u>31</u> |
| <u>Piikea WB Right</u> | <u>B</u> | <u>18</u> | <u>C</u> | <u>23</u> |

Delay expressed in seconds per vehicle.

* Delay greater than 300 seconds per vehicle.



Table 7 Year 2024 No Build Level of Service Scenario 1 (Continued)

| Scenario 1 | AM | | PM | |
|---|----------|------------|----------|-----------|
| | LOS | Delay | LOS | Delay |
| <u>Piikea Ave & Liloa Dr</u> | <u>A</u> | <u>6</u> | <u>A</u> | <u>8</u> |
| <u>Liloa NB Approach</u> | <u>A</u> | <u>5</u> | <u>A</u> | <u>7</u> |
| <u>Liloa SB Approach</u> | <u>A</u> | <u>6</u> | <u>A</u> | <u>7</u> |
| <u>Piikea EB Approach</u> | <u>A</u> | <u>5</u> | <u>A</u> | <u>7</u> |
| <u>Piikea WB Approach</u> | <u>A</u> | <u>6</u> | <u>A</u> | <u>8</u> |
| <u>Piikea Ave & Piilani Hwy</u> | <u>C</u> | <u>34</u> | <u>F</u> | <u>84</u> |
| <u>Piilani NB Left</u> | <u>F</u> | <u>127</u> | <u>F</u> | <u>*</u> |
| <u>Piilani NB Through</u> | <u>A</u> | <u>9</u> | <u>B</u> | <u>11</u> |
| <u>Piilani SB Through</u> | <u>C</u> | <u>30</u> | <u>C</u> | <u>34</u> |
| <u>Piilani SB Right</u> | <u>B</u> | <u>16</u> | <u>C</u> | <u>25</u> |
| <u>Piikea EB Left</u> | <u>F</u> | <u>150</u> | <u>F</u> | <u>*</u> |
| <u>Piikea EB Right</u> | <u>A</u> | <u>0</u> | <u>A</u> | <u>1</u> |
| <u>W. Lipoa St & S. Kihei Rd</u> | <u>B</u> | <u>12</u> | <u>C</u> | <u>21</u> |
| <u>S. Kihei NB Left</u> | <u>A</u> | <u>8</u> | <u>B</u> | <u>16</u> |
| <u>S. Kihei NB Through</u> | <u>B</u> | <u>13</u> | <u>B</u> | <u>14</u> |
| <u>S. Kihei NB Right</u> | <u>A</u> | <u>9</u> | <u>A</u> | <u>8</u> |
| <u>S. Kihei SB Left</u> | <u>A</u> | <u>6</u> | <u>A</u> | <u>10</u> |
| <u>S. Kihei SB Through-Right</u> | <u>A</u> | <u>9</u> | <u>C</u> | <u>23</u> |
| <u>W. Lipoa EB Left-Through</u> | <u>B</u> | <u>18</u> | <u>C</u> | <u>29</u> |
| <u>W. Lipoa EB Right</u> | <u>B</u> | <u>17</u> | <u>C</u> | <u>27</u> |
| <u>W. Lipoa WB Left-Through</u> | <u>B</u> | <u>19</u> | <u>D</u> | <u>36</u> |
| <u>W. Lipoa WB Right</u> | <u>B</u> | <u>18</u> | <u>C</u> | <u>28</u> |
| <u>E. Lipoa St & Liloa Dr</u> | <u>B</u> | <u>12</u> | <u>A</u> | <u>10</u> |
| <u>Liloa NB Left</u> | <u>B</u> | <u>13</u> | <u>B</u> | <u>11</u> |
| <u>Liloa NB Through</u> | <u>B</u> | <u>14</u> | <u>B</u> | <u>11</u> |
| <u>Liloa NB Right</u> | <u>B</u> | <u>13</u> | <u>B</u> | <u>11</u> |
| <u>Liloa SB Left</u> | <u>B</u> | <u>14</u> | <u>B</u> | <u>11</u> |
| <u>Liloa SB Through</u> | <u>B</u> | <u>14</u> | <u>B</u> | <u>11</u> |
| <u>Liloa SB Right</u> | <u>B</u> | <u>13</u> | <u>B</u> | <u>11</u> |
| <u>E. Lipoa EB Left-Through</u> | <u>B</u> | <u>10</u> | <u>A</u> | <u>9</u> |
| <u>E. Lipoa EB Right</u> | <u>B</u> | <u>13</u> | <u>B</u> | <u>10</u> |

Maui Research & Technology Park



| | | | | |
|----------------------------|----------|-----------|----------|----------|
| <u>E. Lipoa WB Left</u> | <u>A</u> | <u>6</u> | <u>A</u> | <u>6</u> |
| <u>E. Lipoa WB Through</u> | <u>A</u> | <u>10</u> | <u>A</u> | <u>9</u> |

NB- northbound, SB- southbound, EB- eastbound, WB- westbound

Delay expressed in seconds per vehicle

* Delay greater than 300 seconds per vehicle.

Table 7 Year 2024 No Build Level of Service Scenario 1 (Continued)

| <u>Scenario 1</u> | <u>AM</u> | | <u>PM</u> | |
|--|----------------------------|------------------|----------------------------|------------------|
| | <u>LOS</u> | <u>Delay</u> | <u>LOS</u> | <u>Delay</u> |
| <u>E. Lipoa St & Piilani Hwy</u> | <u>C</u> | <u>31</u> | <u>D</u> | <u>48</u> |
| <u>Piilani NB Left</u> | <u>E</u> | <u>61</u> | <u>F</u> | <u>89</u> |
| <u>Piilani NB Through</u> | <u>C</u> | <u>26</u> | <u>D</u> | <u>37</u> |
| <u>Piilani NB Right</u> | <u>B</u> | <u>16</u> | <u>B</u> | <u>17</u> |
| <u>Piilani SB Left</u> | <u>E</u> | <u>62</u> | <u>E</u> | <u>78</u> |
| <u>Piilani SB Through</u> | <u>C</u> | <u>30</u> | <u>D</u> | <u>51</u> |
| <u>Piilani SB Right</u> | <u>B</u> | <u>20</u> | <u>C</u> | <u>26</u> |
| <u>E. Lipoa EB Left-Through</u> | <u>E</u> | <u>60</u> | <u>F</u> | <u>81</u> |
| <u>E. Lipoa EB Right</u> | <u>A</u> | <u>0</u> | <u>A</u> | <u>0</u> |
| <u>E. Lipoa WB Left-Through</u> | <u>E</u> | <u>74</u> | <u>E</u> | <u>78</u> |
| <u>E. Lipoa WB Right</u> | <u>A</u> | <u>0</u> | <u>A</u> | <u>0</u> |
| <u>E. Welakahao Rd & S. Kihei Rd</u> | <u>B</u> | <u>10</u> | <u>B</u> | <u>18</u> |
| <u>S. Kihei NB Left</u> | <u>A</u> | <u>6</u> | <u>A</u> | <u>9</u> |
| <u>S. Kihei NB Through-Right</u> | <u>A</u> | <u>10</u> | <u>B</u> | <u>16</u> |
| <u>S. Kihei SB Left</u> | <u>A</u> | <u>6</u> | <u>B</u> | <u>10</u> |
| <u>S. Kihei SB Through-Right</u> | <u>A</u> | <u>8</u> | <u>B</u> | <u>15</u> |
| <u>E. Welakahao EB Left-Through-Right</u> | <u>B</u> | <u>17</u> | <u>C</u> | <u>27</u> |
| <u>E. Welakahao WB Left-Through</u> | <u>B</u> | <u>18</u> | <u>D</u> | <u>43</u> |
| <u>E. Welakahao WB Right</u> | <u>B</u> | <u>16</u> | <u>C</u> | <u>26</u> |
| <u>E. Welakahao Rd & Piilani Hwy</u> | <u>Unsignalized</u> | | <u>Unsignalized</u> | |
| <u>Piilani NB Left</u> | <u>C</u> | <u>17</u> | <u>C</u> | <u>18</u> |
| <u>E. Welakahao EB Left</u> | <u>F</u> | <u>139</u> | <u>F</u> | <u>*</u> |
| <u>Old Welakahao Rd & Piilani Hwy</u> | <u>Unsignalized</u> | | <u>Unsignalized</u> | |
| <u>Piilani SB Left</u> | <u>B</u> | <u>12</u> | <u>C</u> | <u>16</u> |
| <u>Old Welakahao WB Left-Right</u> | <u>D</u> | <u>35</u> | <u>E</u> | <u>42</u> |



Delay expressed in seconds per vehicle.

* Delay greater than 300 seconds per vehicle.

The intersection of Piilani Highway and Lipoa Street/Lipoa Parkway is projected to operate at LOS C during the AM peak hour and LOS D during the PM peak hour. During the AM peak hour, the north and southbound Piilani left turns are projected to operate at LOS E. The Piilani through movements are projected to operate at LOS C. During the PM peak hour, the north and southbound Piilani through movements are projected to operate at LOS C and LOS D, respectively. The north and southbound Piilani left turns are projected to operate at LOS E.

The intersection of South Kihei Road and East Welakahao Road is projected to operate at LOS B during both the AM and PM peak hours. During the AM peak hour, all movements are projected to operate at LOS B or better. All movements are projected to operate at LOS C or better during the PM peak hour with the exception of the westbound East Welakahao left/through movement.

At the north intersection of Piilani Highway and East Welakahao, the eastbound Welakahao left turn is projected to operate at LOS F during both peak hours. At the south intersection, the westbound approach is projected to operate at LOS D during the AM peak hour and at LOS C during the PM peak hour.

As shown above in Table 7 and described earlier, Piilani Highway's intersection with Kaonoulu Street is projected to be a four-legged, signalized intersection. The intersection is projected to operate at LOS C overall during the AM peak hour. During the PM peak hour, the intersection is projected to operate at LOS E overall. Multiple movements, including the north Piilani through movement, are projected to operate at LOS F.

According to the Kihei High School Final Environmental Impact Statement (FEIS), Piilani Highway's intersection with Kulanihakoi Street is projected to be a four-legged, signalized intersection. The intersection is projected to operate at LOS C overall during the AM and PM peak hours. During both peaks, multiple movements are projected to operate at LOS E. The eastbound right turn at the intersection of Piilani Highway and East Waipuilani is projected to operate at LOS D during the AM peak hour and at LOS C during the PM peak hour.



At the intersection of South Kihei Road and Piikea Avenue all movements are projected to operate at LOS C or better during both peak hours.

The intersection of Liloa Drive and Piikea Avenue is a roundabout. All approaches are projected to operate at LOS A or better during both the AM and PM peak hours.

The intersection of Piilani Highway and Piikea Avenue is projected to operate at LOS C during the AM peak hour and LOS F during the PM peak hour. The northbound Piilani left turn to Piikea and the eastbound Piikea left turn to Piilani are projected to operate at LOS F during the AM and PM peak hours.

At the intersection of South Kihei Road and Lipoa Street all movements are projected to operate at LOS B or better during the AM peak hour and at LOS D or better during the PM peak hour.

The intersection of Liloa Drive and Lipoa Street is projected to operate at LOS B during the AM peak hour and LOS A during the PM peak hour.

The intersection of Piilani Highway and Lipoa Street/Lipoa Parkway is projected to operate at LOS C during the AM peak hour and LOS D during the PM peak hour. During the AM peak hour, the north and southbound Piilani left turns are projected to operate at LOS E. The Piilani through movements are projected to operate at LOS C. During the PM peak hour, the north and southbound Piilani through movements are projected to operate at LOS D. The north and southbound Piilani left turns are projected to operate at LOS F and E, respectively.

The intersection of South Kihei Road and East Welakahao Road is projected to operate at LOS B during both the AM and PM peak hours. During the AM peak hour, all movements are projected to operate at LOS B or better. All movements are projected to operate at LOS C or better during the PM peak hour with the exception of the westbound East Welakahao left/through movement (LOS D).

At the intersection of Piilani Highway and East Welakahao Road, the eastbound Welakahao left turn is projected to operate at LOS F during both peak hours.



At the intersection of Piilani Highway and Old Welakahao Road, the westbound approach is projected to operate at LOS D during the AM peak hour and at LOS E during the PM peak hour.

Recommended Mitigation for without Project Conditions

Intersections analyzed are projected to operate close to capacity along Piilani Highway in Year 2024 without the proposed project. This is caused by regional growth, including the development projects listed in Section III.A.2 of the report. To mitigate the impact caused by regional growth, it is important that the north-south collector be constructed and operational to alleviate pressure on Piilani Highway.

The intersection of Piilani Highway and Piikea Avenue is particularly affected by the through volumes on Piilani Highway, and improvements may be necessary to increase capacity for the mauka bound approach and the northbound left turn.

Based on the assumed background growth projections, the following improvements are recommended to be implemented by year 2024 to address the without project conditions:

- Complete Liloa Drive continuously between Kaonoulu Street and Kanani Road as a two-lane roadway; and
- At the intersection of Piilani Highway/East Welakahao Road, observe queuing at the East Welakahao approach left turn to determine the extent to which the northbound Piilani Highway refuge lane is utilized.

It is recommended that future regional traffic studies confirm the need for these improvements based upon actual operating conditions closer to the time that these improvements are constructed.

Potential Impacts and Mitigation Measures.

With Project Scenario 2 - Build

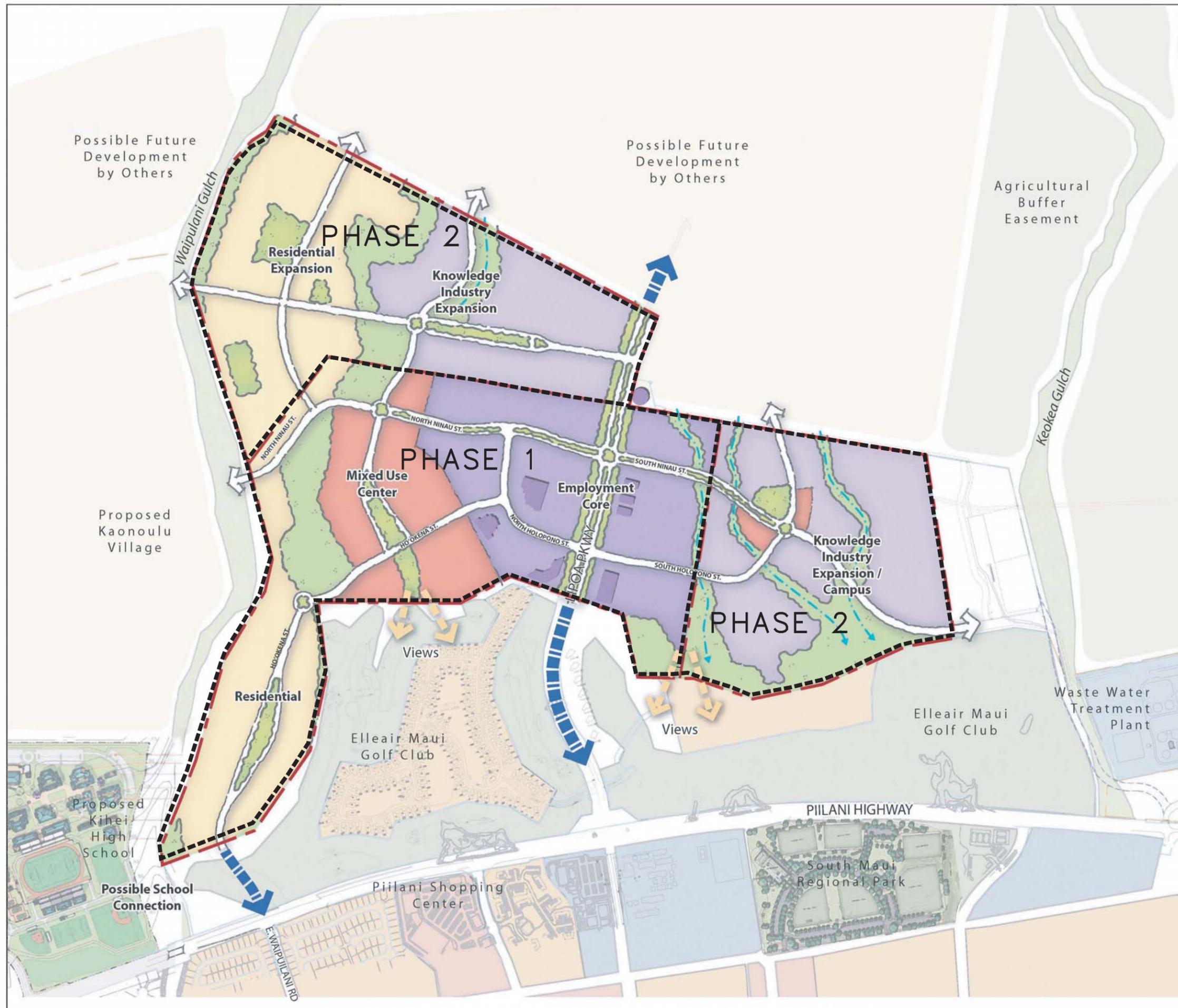
The Year 2024 analysis year was used to analyze the impact of Phase 1 of the MRTTP project (See: Figure 35, "Development Phasing Plan"). Scenario 2, the Build scenario adds MRTTP development Phase 1 generated trips to the No Build scenario. The assumed roadway network is the same as in the No Build scenario.



As shown in Figure 2 of the TIAR, Phase 1 consists of residential, mixed-use commercial, and the employment core. It will also contain an elementary school and business hotel. The employment will be located directly off of Lipoa Parkway. The mixed use will be located just north of the employment core. The residential will be located northwest of the mixed-use, close to Piilani Highway as well as the future Kihei High School. An elementary school is planned to be located within the northern portion of Phase 1. Finally, a business hotel is planned to be located on the fringe of the mixed-use core. The Year 2024 analysis year was used to analyze the impact of Phase 1 of the MRTP project (See: Figure 35, “Development Phasing Plan”).

Maui Research & Technology Park

OVERALL CONCEPT DIAGRAM



LEGEND

- Project Boundary
- Mixed-Use
- Knowledge Industry
- Knowledge Industry Expansion
- Residential & Expansion
- Open Space / Parks

PHASE I
Completion anticipated in 2024
PHASE II
Completion anticipated in 2034

FIGURE NO. 35
DEVELOPMENT PHASING PLAN
MAUI RESEARCH & TECHNOLOGY PARK
Kihei, Maui, Hawaii

March 20, 2012

0' 400' 800'





Phase 1 consists of residential, mixed-use commercial, and the employment core. The employment will be located directly off of Lipoa Parkway. The mixed use will be located just north of the employment core. The residential will be located northwest of the mixed-use, close to Piilani Highway as well as the future Kihei High School.

Future Roadways and Transit

To address Year 2024 with Project conditions, it is assumed that the following infrastructure improvements and transit services, as warranted, are in place prior to the development:

- The Liloa Drive extension would be in place between Kaonoulu Street and Kanani Road, providing additional mobility throughout the Kihei area.
- The Maui Bus system will continue to serve the MRTP development, possibly increasing the number of daily scheduled stops.

Trip Generation

The *Institute of Transportation Engineers (ITE), Trip Generation, 8th edition* was used to estimate the number of trips generated by the MRTP development based on land uses identified in the conceptual development plan shown in Figure 2 of the TIAR (See: Appendix G).

The conceptual development plan shows proposed development parcels within the MRTP development. Existing MRTP parcels were treated as background traffic. The site-generated traffic acknowledges only the development yet to be constructed and occupied. ~~Residential was broken into 60% single family 20% townhouse, and 20% mid-rise apartment. Table 8 below summarizes the trips generated by Phase 1 of the proposed MRTP development. An internal capture rate was devised using ITE methodology. In addition, a 5% transit share and a 5% mode choice share were assumed for pedestrians and cyclists.~~

Phase 1 of MRTP consists of the following:

- 723,200 SF of Employment
- 100,000 SF of Retail
- 750 Residential DU broken down as follows:
 - 150 DU Mid-Rise



- 450 DU Single Family
- 150 DU Townhouse
- 150 Hotel Rooms
- 102,000 SF of Elementary School.

Table 8 summarizes the trips generated by Phase 1 of the proposed MRTP development. The residential was broken down into 60% single family, 20% townhouse, and 20% mid-rise apartment land uses. The trip generation in the revised TIAR represents the sum of these three (3) residential types. An internal capture rate was devised using ITE methodology. In addition, a 5% mode choice share was assumed for pedestrians and cyclists.

The Applicant will work with HDOT to estimate the external trips based on the assumed low, medium, and high internal capture rates. This would provide HDOT a useful tool to gauge the traffic impact by different levels of internal capture. Internal capture for local school and community shopping center are not clearly defined by the ITE Trip Generation Manual. The planned elementary school will be built largely for the Maui R&T Park development. It is not anticipated that the school will generate a significant amount of external trips. Similarly the community shopping center as currently planned is not visible from Piilani Highway and will mostly serve the Maui R&T Park development. With Kihei Elementary School nearby and other more convenient shopping centers located makai of Piilani Highway, the Applicant will assume higher than 15% internal capture rates for the planned school and community shopping center.

In addition, the development will utilize the principles of new urbanism and smart growth providing diverse housing options within close proximity of the park's employment and integrating neighborhood serving retail, civic and commercial uses in a manner that encourages bicycling and walking. The residential component of the development will be targeted at the employees of the MRTP which will reduce the need for workers to drive to and from work. For conservative purposes, we agree that 15% internal capture applies to residential and office land uses.

MRTP has been working with HDOT to estimate the external trips based on the assumed low, medium, and high internal capture rates in order to gauge the traffic impact by different levels of internal capture. As determined by HDOT, the project's external trips were revised to remove the 5% transit share reduction because the ITE Trip Generation Rates already take into account transit share.



Table 8, Phase 1 Trip Generation Summary

| | | | AM Peak | | PM Peak | |
|--------------|----------|------------|------------|------------|------------|------------|
| Land Use | ITE Code | Density | IN | OUT | IN | OUT |
| Employment | 760 | 723,200 SF | 434 | 90 | 67 | 401 |
| Retail | 750 | 100,000 SF | 41 | 25 | 50 | 61 |
| Residential | Various | 750 DU | 61 | 227 | 136 | 105 |
| Hotel | 310 | 150 Rooms | 24 | 13 | 18 | 22 |
| School | 520 | 102,000 SF | 164 | 170 | 25 | 30 |
| Total | | | 724 | 525 | 296 | 619 |

Table 8 Phase 1 Trip Generation Summary

| Phase 1 | | | AM Peak Hour | | | PM Peak Hour | | |
|--|------------------------------|------------|--------------|------------|--------------|--------------|--------------|--------------|
| | | | In | Out | Total | In | Out | Total |
| OFFICE | 760 | 723,200 SF | 605 | 124 | 729 | 99 | 559 | 658 |
| | <i>After Mode Reductions</i> | | <u>575</u> | <u>118</u> | <u>693</u> | <u>94</u> | <u>531</u> | <u>625</u> |
| RETAIL | 814 | 100,000 SF | 45 | 28 | 73 | 115 | 146 | 261 |
| | <i>After Mode Reductions</i> | | <u>43</u> | <u>27</u> | <u>70</u> | <u>109</u> | <u>139</u> | <u>248</u> |
| RESIDENTIAL | 223 | 150 DU | 15 | 33 | 48 | 35 | 26 | 61 |
| | 210 | 450 DU | 81 | 369 | 450 | 256 | 151 | 407 |
| | 230 | 150 DU | 11 | 55 | 66 | 52 | 26 | 78 |
| | <i>Residential Total</i> | | <u>107</u> | | | | | |
| <i>After Mode Reductions</i> | | <u>102</u> | <u>434</u> | <u>536</u> | <u>326</u> | <u>193</u> | <u>519</u> | |
| HOTEL | 310 | 150 Rooms | 41 | 27 | 68 | 47 | 42 | 89 |
| | <i>After Mode Reductions</i> | | <u>39</u> | <u>26</u> | <u>65</u> | <u>45</u> | <u>40</u> | <u>85</u> |
| INSTITUTION | 522 | 102,000 SF | 279 | 219 | 498 | 55 | 68 | 123 |
| | <i>After Mode Reductions</i> | | <u>265</u> | <u>208</u> | <u>473</u> | <u>52</u> | <u>65</u> | <u>117</u> |
| Subtotal Trips (Before Mode Reductions) | | | 1,077 | 855 | 1,932 | 659 | 1,018 | 1,677 |
| Subtotal Trips (After Mode Reductions) | | | 1,024 | 813 | 1,837 | 626 | 968 | 1,594 |
| <i>Residential Internal Capture Reduction</i> | | | <u>48</u> | <u>196</u> | <u>244</u> | <u>113</u> | <u>74</u> | <u>187</u> |
| <i>Retail Internal Capture Reduction</i> | | | <u>6</u> | <u>10</u> | <u>16</u> | <u>84</u> | <u>35</u> | <u>119</u> |
| <i>Office Internal Capture Reduction</i> | | | <u>86</u> | <u>25</u> | <u>111</u> | <u>22</u> | <u>105</u> | <u>127</u> |
| <i>Institution Internal Capture Reduction</i> | | | <u>130</u> | <u>31</u> | <u>161</u> | <u>26</u> | <u>33</u> | <u>59</u> |
| <i>Hotel Internal Capture Reduction</i> | | | <u>6</u> | <u>14</u> | <u>20</u> | <u>24</u> | <u>22</u> | <u>46</u> |
| Total Internal Capture Reductions | | | 276 | 276 | 552 | 269 | 269 | 538 |
| Total External Trips | | | 748 | 537 | 1,285 | 357 | 699 | 1,056 |



Trips generated expressed in vehicles per hour

Low, medium, and high internal capture rates were developed to represent the internal interactions between the different land uses for Phase 1. For the purpose of this analysis, the low internal capture that would result in highest external trips was used. Specifically,

- 220/1055 or 21% of residential trips interacted directly with the school;
- 68/1055 or 6% of residential trips interacted directly with the commercial;
- 143/1318 or 11% of employment trips interacted directly with the residential;
and
- 47/1318 or 4% of employment trips interacted directly with the business hotel.

A more detailed explanation of internal capture assumptions is shown in Appendix D of the TIAR. (See: Appendix G “Traffic Impact Analysis Report”).

Trip Assignment

The traffic generated by the proposed MRTP Development was directionally distributed and assigned to the future roadway network.

A summary of regional travel patterns within the Kihei area was created from the Maui travel demand model. MRTP traffic was assigned to the projected roadway network using this distribution. Internal traffic was distributed between the residential, hotel, school, employment, and retail commercial land uses. These distributions were applied to the trips generated.

Total Traffic

The traffic generated by the MRTP development was added to the projected background traffic to obtain the total peak hour traffic volumes shown in Figure 7 6 of the TIAR (See: Appendix G, “Traffic Impact Analysis Report”). ~~Table 9 contains MRTP’s traffic as a percentage of the total traffic with the project.~~

Table 9, Phase 1 Project’s Share of Total Intersection Traffic Volumes

| | | Project | Project + BG | % |
|---------------------|----|---------|--------------|-----|
| - | | | | |
| East Waipuilani Rd/ | AM | 840 | 4302 | 20% |



| - | | Project | Project + BG | % |
|--|----|---------|--------------|-----|
| Piilani Hwy | PM | 640 | 3987 | 16% |
| Piikea Ave/ Piilani Hwy | AM | 580 | 4443 | 13% |
| | PM | 364 | 4457 | 8% |
| Lipoa Pkwy/ Piilani Hwy | AM | 1099 | 4520 | 24% |
| | PM | 768 | 3863 | 20% |
| East Welakahao Rd (N)/ Piilani Hwy | AM | 192 | 2813 | 7% |
| | PM | 181 | 2730 | 7% |
| East Welakahao Rd (S)/ Piilani Hwy | AM | 192 | 2606 | 7% |
| | PM | 181 | 2416 | 7% |
| Liloa Dr/ Piikea Ave | AM | 131 | 1471 | 9% |
| | PM | 90 | 1939 | 5% |
| Liloa Dr/ Lipoa St | AM | 327 | 1772 | 18% |
| | PM | 223 | 2202 | 10% |
| S. Kihei Rd/ Piikea Ave | AM | 28 | 1308 | 2% |
| | PM | 19 | 1850 | 1% |
| S. Kihei Rd/ Lipoa St | AM | 46 | 1368 | 3% |
| | PM | 31 | 2042 | 2% |
| S. Kihei Rd/ East Welakahao Rd | AM | 18 | 1207 | 1% |
| | PM | 11 | 1894 | 1% |

As shown in Table 9, background traffic is responsible for the majority of the total peak hour traffic volumes. At the intersection of Piilani Highway and Lipoa Parkway, project traffic is projected to account for 24% and 20% of the intersection's traffic during the AM and PM peak hours, respectively. At the intersection of Piilani Highway and Piikea Avenue, project traffic is projected to account for 13% and 8% during the AM and PM peak hours, respectively. At the intersection of Piikea Avenue and Liloa Drive, project traffic is projected to account for 9% and 5% during the AM and PM peak hours, respectively. Finally, at the intersection of Liloa Drive and Lipoa Street, project traffic is projected to account for 18% and 10% during the AM and PM peak hours, respectively.



Year 2024 Operations with Project Scenario 2 - Build

Level of Service analysis was performed on the study area intersections. These results are shown in Table 10 below and Figure 8 of the TIAR, (See: Appendix F G, “Traffic Impact Analysis”) shows the projected 2024 lane configurations.

Table 10, Projected Year 2024 Level of Service with Project

| 2024 with project | AM | | PM | |
|---|---------------------|-----------|---------------------|-----------|
| | LOS | Delay | LOS | Delay |
| E. Waipuilani Rd & Piilani Hwy | Unsignalized | | Unsignalized | |
| E. Waipuilani EB Right | D | 33 | C | 19 |
| E. Waipuilani WB Right | C | 22 | E | 48 |
| S. Kihei Rd & Piikea Ave | B | 10 | B | 17 |
| S. Kihei NB Left | A | 8 | A | 9 |
| S. Kihei NB Through | B | 13 | B | 18 |
| S. Kihei NB Right | A | 8 | B | 11 |
| S. Kihei SB Left | A | 5 | B | 11 |
| S. Kihei SB Through Right | A | 7 | A | 10 |
| Piikea WB Left Through | B | 17 | C | 29 |
| Piikea WB Right | B | 15 | C | 21 |
| Piikea Ave & Liloa Dr | C | 17 | E | 38 |
| Liloa NB Approach | B | 12 | E | 45 |
| Liloa SB Approach | D | 26 | D | 33 |
| Piikea EB Approach | B | 12 | B | 15 |
| Piikea WB Approach | B | 12 | E | 48 |
| Piikea Ave & Piilani Hwy | D | 41 | D | 40 |
| Piilani NB Left | F | 155 | F | 93 |
| Piilani NB Through | B | 11 | B | 19 |
| Piilani SB Through | D | 50 | D | 55 |
| Piilani SB Right | B | 17 | D | 35 |
| Piikea EB Left | F | 114 | F | 87 |
| Piikea EB Right | A | 1 | A | 1 |
| W. Lipoa St & S. Kihei Rd | B | 13 | B | 18 |
| S. Kihei NB Left | A | 9 | B | 12 |
| S. Kihei NB Through | B | 14 | B | 14 |

Maui Research & Technology Park



| 2024 with project | AM | | PM | |
|--|----------|-----------|----------|-----------|
| | LOS | Delay | LOS | Delay |
| S. Kihei NB Right | B | 10 | A | 9 |
| S. Kihei SB Left | A | 5 | A | 9 |
| S. Kihei SB Through Right | A | 9 | C | 20 |
| W. Lipoa EB Left Through | B | 19 | C | 25 |
| W. Lipoa EB Right | B | 18 | C | 24 |
| W. Lipoa WB Left Through | C | 21 | C | 32 |
| W. Lipoa WB Right | B | 19 | C | 24 |
| E. Lipoa St & Liloa Dr | B | 16 | D | 36 |
| Liloa NB Left | B | 15 | B | 12 |
| Liloa NB Through | B | 18 | D | 43 |
| Liloa NB Right | B | 15 | B | 12 |
| Liloa SB Left | C | 25 | B | 15 |
| Liloa SB Through | B | 17 | E | 79 |
| Liloa SB Right | B | 15 | B | 12 |
| E. Lipoa EB Left | B | 15 | B | 14 |
| E. Lipoa EB Through Right | B | 19 | B | 18 |
| E. Lipoa WB Left | A | 9 | A | 8 |
| E. Lipoa WB Through | B | 12 | B | 12 |
| E. Lipoa WB Right | A | 11 | B | 10 |
| E. Lipoa St & Piilani Hwy | D | 42 | D | 43 |
| Piilani NB Left | E | 72 | E | 64 |
| Piilani NB Through | D | 43 | D | 39 |
| Piilani NB Right | C | 27 | C | 23 |
| Piilani SB Left | E | 61 | E | 64 |
| Piilani SB Through | C | 34 | D | 45 |
| Piilani SB Right | C | 23 | C | 30 |
| E. Lipoa EB Left | E | 65 | E | 58 |
| E. Lipoa EB Through | D | 39 | C | 31 |
| E. Lipoa EB Right | C | 34 | C | 30 |
| E. Lipoa WB Left | D | 44 | D | 36 |
| E. Lipoa WB Through | D | 36 | C | 33 |
| E. Lipoa WB Right | C | 34 | C | 32 |
| E. Welakahao Rd & S. Kihei Rd | B | 10 | B | 16 |
| S. Kihei NB Left | A | 6 | A | 8 |



| 2024 with project | AM | | PM | |
|------------------------------------|-----|-------|-----|-------|
| | LOS | Delay | LOS | Delay |
| S. Kihei NB Through Right | B | 10 | B | 14 |
| S. Kihei SB Left | A | 6 | A | 8 |
| S. Kihei SB Through Right | A | 8 | B | 13 |
| E. Welakahao EB Left Through Right | B | 17 | C | 25 |
| E. Welakahao WB Left Through | B | 18 | D | 38 |
| E. Welakahao WB Right | B | 16 | C | 24 |

NB- northbound, SB- southbound, EB- eastbound, WB- westbound

Delay expressed in seconds per vehicle.

Table 9 Year 2024 Build Level of Service Scenario 2

| Scenario 2 | AM | | PM | |
|---|----------|-----------|----------|------------|
| | LOS | Delay | LOS | Delay |
| Kaonoulu St & Piilani Hwy | D | 51 | F | 116 |
| Piilani NB Left | E | 68 | F | 127 |
| Piilani NB Through | C | 30 | F | 204 |
| Piilani NB Right | B | 11 | C | 29 |
| Piilani SB Left | D | 52 | F | 139 |
| Piilani SB Through | E | 74 | E | 63 |
| Piilani SB Right | A | 9 | B | 16 |
| Kaonoulu EB Left | D | 52 | E | 56 |
| Kaonoulu EB Through | E | 58 | F | 84 |
| Kaonoulu EB Right | A | 0 | A | 0 |
| Kaonoulu WB Left | D | 53 | F | 142 |
| Kaonoulu WB Through | D | 53 | E | 65 |
| Kaonoulu WB Right | D | 51 | D | 53 |
| Kulanihakoi St & Piilani Hwy | E | 63 | E | 61 |
| Piilani NB Left | E | 67 | E | 71 |
| Piilani NB Through | D | 41 | E | 75 |
| Piilani NB Right | A | 0 | A | 0 |
| Piilani SB Left | E | 73 | E | 61 |
| Piilani SB Through | F | 91 | D | 51 |
| Piilani SB Right | A | 0 | A | 0 |
| Kulanihakoi EB Left-Through | D | 50 | D | 50 |

Maui Research & Technology Park



| | | | | |
|--|----------------------------|------------------|----------------------------|------------------|
| <u>Kulanihakoi EB Right</u> | <u>A</u> | <u>0</u> | <u>A</u> | <u>0</u> |
| <u>Kulanihakoi WB Left-Through</u> | <u>F</u> | <u>81</u> | <u>E</u> | <u>60</u> |
| <u>Kulanihakoi WB Right</u> | <u>A</u> | <u>0</u> | <u>A</u> | <u>0</u> |
| <u>E. Waipuilani Rd & Piilani Hwy</u> | <u>Unsignalized</u> | | <u>Unsignalized</u> | |
| <u>E. Waipuilani EB Right</u> | <u>E</u> | <u>41</u> | <u>C</u> | <u>24</u> |
| <u>S. Kihei Rd & Piikea Ave</u> | <u>A</u> | <u>10</u> | <u>B</u> | <u>18</u> |
| <u>S. Kihei NB Left</u> | <u>A</u> | <u>7</u> | <u>A</u> | <u>9</u> |
| <u>S. Kihei NB Through</u> | <u>B</u> | <u>11</u> | <u>C</u> | <u>21</u> |
| <u>S. Kihei NB Right</u> | <u>A</u> | <u>7</u> | <u>B</u> | <u>11</u> |
| <u>S. Kihei SB Left</u> | <u>A</u> | <u>5</u> | <u>B</u> | <u>13</u> |
| <u>S. Kihei SB Through-Right</u> | <u>A</u> | <u>6</u> | <u>B</u> | <u>10</u> |
| <u>Piikea WB Left-Through</u> | <u>C</u> | <u>21</u> | <u>C</u> | <u>32</u> |
| <u>Piikea WB Right</u> | <u>B</u> | <u>19</u> | <u>C</u> | <u>23</u> |

Delay expressed in seconds per vehicle.

* Delay greater than 300 seconds per vehicle.



Table 9 Year 2024 Build Level of Service Scenario 2 (Continued)

| Scenario 2 | AM | | PM | |
|--------------------------------------|----------|------------|----------|-----------|
| | LOS | Delay | LOS | Delay |
| Piikea Ave & Liloa Dr | <u>A</u> | <u>6</u> | <u>A</u> | <u>8</u> |
| <u>Liloa NB Approach</u> | <u>A</u> | <u>5</u> | <u>A</u> | <u>7</u> |
| <u>Liloa SB Approach</u> | <u>A</u> | <u>6</u> | <u>A</u> | <u>7</u> |
| <u>Piikea EB Approach</u> | <u>A</u> | <u>5</u> | <u>A</u> | <u>7</u> |
| <u>Piikea WB Approach</u> | <u>A</u> | <u>6</u> | <u>A</u> | <u>9</u> |
| Piikea Ave & Piilani Hwy | <u>D</u> | <u>54</u> | <u>F</u> | <u>95</u> |
| <u>Piilani NB Left</u> | <u>F</u> | <u>155</u> | <u>F</u> | <u>*</u> |
| <u>Piilani NB Through</u> | <u>B</u> | <u>11</u> | <u>B</u> | <u>15</u> |
| <u>Piilani SB Through</u> | <u>E</u> | <u>72</u> | <u>D</u> | <u>36</u> |
| <u>Piilani SB Right</u> | <u>B</u> | <u>15</u> | <u>C</u> | <u>23</u> |
| <u>Piikea EB Left</u> | <u>F</u> | <u>186</u> | <u>F</u> | <u>*</u> |
| <u>Piikea EB Right</u> | <u>A</u> | <u>0</u> | <u>A</u> | <u>1</u> |
| W. Lipoa St & S. Kihei Rd | <u>B</u> | <u>13</u> | <u>C</u> | <u>21</u> |
| <u>S. Kihei NB Left</u> | <u>A</u> | <u>9</u> | <u>B</u> | <u>16</u> |
| <u>S. Kihei NB Through</u> | <u>B</u> | <u>14</u> | <u>B</u> | <u>15</u> |
| <u>S. Kihei NB Right</u> | <u>B</u> | <u>10</u> | <u>A</u> | <u>8</u> |
| <u>S. Kihei SB Left</u> | <u>A</u> | <u>6</u> | <u>B</u> | <u>10</u> |
| <u>S. Kihei SB Through-Right</u> | <u>A</u> | <u>9</u> | <u>C</u> | <u>24</u> |
| <u>W. Lipoa EB Left-Through</u> | <u>B</u> | <u>20</u> | <u>C</u> | <u>29</u> |
| <u>W. Lipoa EB Right</u> | <u>B</u> | <u>19</u> | <u>C</u> | <u>27</u> |
| <u>W. Lipoa WB Left-Through</u> | <u>C</u> | <u>22</u> | <u>D</u> | <u>39</u> |
| <u>W. Lipoa WB Right</u> | <u>B</u> | <u>20</u> | <u>C</u> | <u>28</u> |
| E. Lipoa St & Liloa Dr | <u>B</u> | <u>13</u> | <u>B</u> | <u>10</u> |
| <u>Liloa NB Left</u> | <u>B</u> | <u>16</u> | <u>B</u> | <u>11</u> |
| <u>Liloa NB Through</u> | <u>B</u> | <u>17</u> | <u>B</u> | <u>12</u> |
| <u>Liloa NB Right</u> | <u>B</u> | <u>15</u> | <u>B</u> | <u>11</u> |
| <u>Liloa SB Left</u> | <u>B</u> | <u>17</u> | <u>B</u> | <u>12</u> |
| <u>Liloa SB Through</u> | <u>B</u> | <u>17</u> | <u>B</u> | <u>12</u> |
| <u>Liloa SB Right</u> | <u>B</u> | <u>15</u> | <u>B</u> | <u>11</u> |
| <u>E. Lipoa EB Left-Through</u> | <u>B</u> | <u>11</u> | <u>A</u> | <u>10</u> |
| <u>E. Lipoa EB Right</u> | <u>B</u> | <u>15</u> | <u>B</u> | <u>13</u> |

Maui Research & Technology Park



| | | | | |
|----------------------------|----------|----------|----------|----------|
| <u>E. Lipoa WB Left</u> | <u>A</u> | <u>6</u> | <u>A</u> | <u>6</u> |
| <u>E. Lipoa WB Through</u> | <u>A</u> | <u>9</u> | <u>A</u> | <u>9</u> |
| <u>E. Lipoa WB Right</u> | <u>A</u> | <u>8</u> | <u>A</u> | <u>7</u> |

Delay expressed in seconds per vehicle.

* Delay greater than 300 seconds per vehicle.



Table 9 Year 2024 Build Level of Service Scenario 2 (Continued)

| Scenario 2 | AM | | PM | |
|--|----------------------------|-------------------|----------------------------|-------------------|
| | LOS | Delay | LOS | Delay |
| <u>E. Lipoa St & Piilani Hwy</u> | <u>F</u> | <u>224</u> | <u>F</u> | <u>134</u> |
| <u>Piilani NB Left</u> | <u>F</u> | <u>90</u> | <u>F</u> | <u>108</u> |
| <u>Piilani NB Through</u> | <u>D</u> | <u>47</u> | <u>E</u> | <u>58</u> |
| <u>Piilani NB Right</u> | <u>C</u> | <u>29</u> | <u>C</u> | <u>24</u> |
| <u>Piilani SB Left</u> | <u>F</u> | <u>*</u> | <u>F</u> | <u>*</u> |
| <u>Piilani SB Through</u> | <u>E</u> | <u>62</u> | <u>E</u> | <u>79</u> |
| <u>Piilani SB Right</u> | <u>C</u> | <u>32</u> | <u>C</u> | <u>32</u> |
| <u>E. Lipoa EB Left-Through</u> | <u>F</u> | <u>105</u> | <u>F</u> | <u>103</u> |
| <u>E. Lipoa EB Right</u> | <u>A</u> | <u>0</u> | <u>A</u> | <u>0</u> |
| <u>E. Lipoa WB Left-Through</u> | <u>F</u> | <u>184</u> | <u>F</u> | <u>*</u> |
| <u>E. Lipoa WB Right</u> | <u>A</u> | <u>0</u> | <u>A</u> | <u>1</u> |
| <u>E. Welakahao Rd & S. Kihei Rd</u> | <u>B</u> | <u>10</u> | <u>B</u> | <u>18</u> |
| <u>S. Kihei NB Left</u> | <u>A</u> | <u>6</u> | <u>A</u> | <u>10</u> |
| <u>S. Kihei NB Through-Right</u> | <u>B</u> | <u>10</u> | <u>B</u> | <u>17</u> |
| <u>S. Kihei SB Left</u> | <u>A</u> | <u>6</u> | <u>B</u> | <u>11</u> |
| <u>S. Kihei SB Through-Right</u> | <u>A</u> | <u>8</u> | <u>B</u> | <u>16</u> |
| <u>E. Welakahao EB Left-Through-Right</u> | <u>B</u> | <u>18</u> | <u>C</u> | <u>28</u> |
| <u>E. Welakahao WB Left-Through</u> | <u>B</u> | <u>19</u> | <u>D</u> | <u>44</u> |
| <u>E. Welakahao WB Right</u> | <u>B</u> | <u>17</u> | <u>C</u> | <u>26</u> |
| <u>E. Welakahao Rd & Piilani Hwy</u> | <u>Unsignalized</u> | | <u>Unsignalized</u> | |
| <u>Piilani NB Left</u> | <u>C</u> | <u>20</u> | <u>C</u> | <u>24</u> |
| <u>E. Welakahao EB Left</u> | <u>F</u> | <u>*</u> | <u>F</u> | <u>*</u> |
| <u>Old Welakahao Rd & Piilani Hwy</u> | <u>Unsignalized</u> | | <u>Unsignalized</u> | |
| <u>Piilani SB Left</u> | <u>B</u> | <u>13</u> | <u>C</u> | <u>17</u> |
| <u>Old Welakahao WB Left-Right</u> | <u>F</u> | <u>50</u> | <u>F</u> | <u>54</u> |

Delay expressed in seconds per vehicle.

* Delay greater than 300 seconds per vehicle.

As shown in Table 10, the eastbound right turn at the intersection of Piilani Highway and East Waipuilani is projected to operate at LOS D during the AM peak hour. The westbound right turn is projected to operate at LOS E during the PM peak hour.



The intersection of South Kihei Road and Piikea Avenue is projected to operate at LOS B during both the AM and PM peak hours. All movements are projected to operate at LOS C or better during the AM and PM peak hours.

The existing configuration of the intersection of Liloa Drive and Piikea Avenue is unsignalized, all way stop controlled intersection. This all way stop control will be replaced by a roundabout. As a roundabout, the intersection is projected to operate at LOS C during the AM peak hour. During the PM peak hour, the intersection is projected to operate at LOS E.

The intersection of Piilani Highway and Piikea Avenue is projected to operate at LOS D during the AM and PM peak hours. During both the AM and PM peak hours, the northbound Piilani left turn to Piikea and the eastbound Piikea left turn to Piilani are projected to operate at LOS F. For the purpose of this analysis, the existing cycle length was used, which contributes to the intersection's overall delay.

The intersection of South Kihei Road and Lipoa Street is projected to operate at LOS B during both the AM and PM peak hours. All movements operate at LOS C or better during both the AM and PM peak hours.

The intersection of Liloa Drive and Lipoa Street is projected to operate at LOS B during the AM peak hour and LOS D during the PM peak hour. All movements are projected to operate at LOS C or better during the AM peak hour. During the PM peak hour, the north and southbound through movements are projected to operate at LOS D and E, respectively.

The intersection of Piilani Highway and Lipoa Street/Lipoa Parkway is projected to require double southbound Piilani left turns and widening of the eastbound and westbound Lipoa approach as shown in Figure 8 of the TIAR (See: Appendix C, "Traffic Impact Analysis"). The intersection is projected to operate at LOS D during both the AM and PM peak hours. During the AM peak hour, the Piilani left turns are projected to operate at LOS E. The north and southbound Piilani through movements are projected to operate at LOS D and LOS C, respectively. During the PM peak hour, the Piilani through movements are projected to operate at LOS D. The north and southbound



~~Piilani left turns are projected to operate at LOS E. The eastbound Lipoa left turn is projected to operate at LOS E during both peaks.~~

~~The intersection of South Kihei Road and East Welakahao Road is projected to operate at LOS B during both the AM and PM peak hours. During the AM peak hour, all movements are projected to operate at LOS B or better. All movements are projected to operate at LOS C or better during the PM peak hour with the exception of the westbound East Welakahao left/through movement which is projected to operate at LOS D.~~

~~At the north intersection of Piilani Highway and East Welakahao, the eastbound Welakahao left turn is projected to operate at LOS F during both peak hours. At the south intersection, the westbound approach is projected to operate at LOS D during the AM peak hour and at LOS C during the PM peak hour.~~

As shown above in Table 9 Piilani Highway's intersection with Kulanihakoi Street is projected to operate at LOS E overall during the AM and PM peak hours. During both peaks, multiple movements are projected to operate at LOS E or F. The eastbound right turn at the intersection of Piilani Highway and East Waipuilani is projected to operate at LOS E during the AM peak hour. It is projected to operate at LOS C during the PM peak hour.

At the intersection of South Kihei Road and Piikea Avenue all movements are projected to operate at LOS C or better during the AM and PM peak hours.

All approaches at the intersection of Liloa Drive and Piikea Avenue are projected to operate at LOS A or better during both the AM and PM peak hours.

The intersection of Piilani Highway and Piikea Avenue is projected to operate at LOS D during the AM peak hour and at LOS F during the PM peak hour. During both the AM and PM peak hours, the northbound Piilani left turn to Piikea and the eastbound Piikea left turn to Piilani are projected to operate at LOS F. The Piilani southbound through movement is projected to operate at LOS E during the AM peak hour and at LOS D during the PM peak hour.

The intersection of South Kihei Road and Lipoa Street is projected to operate at LOS B during the AM peak hour and at LOS C during the PM peak hour. All movements are



projected to operate at LOS C or better during the AM peak hour and at LOS D or better during the PM peak hour.

At the intersection of Liloa Drive and Lipoa Street all movements are projected to operate at LOS B or better during both peak hours.

With no project-related improvements, the intersection of Piilani Highway and Lipoa Street/Lipoa Parkway is projected to operate at LOS F during both the AM and PM peak hours. During the AM peak hour, the Piilani left turns are projected to operate at LOS F. The north and southbound Piilani through movements are projected to operate at LOS D and LOS E, respectively. During the PM peak hour, the Piilani through movements are projected to operate at LOS E. The north and southbound Piilani left turns are projected to operate at LOS F. The eastbound Lipoa left/through movements are projected to operate at LOS F during both peaks.

The intersection of South Kihei Road and East Welakahao Road is projected to operate at LOS B during both the AM and PM peak hours. During the AM peak hour, all movements are projected to operate at LOS B or better. All movements are projected to operate at LOS D or better during the PM peak hour.

At the intersection of Piilani Highway and East Welakahao Road, the eastbound Welakahao left turn is projected to operate at LOS F during both peak hours.

At the intersection of Piilani Highway and Old Welakahao Road, the westbound Welakahao left turn is projected to operate at LOS F during both peak hours.

Recommended Mitigation for With Project Conditions

~~Based on the assumed background growth projections together with the Project, the subject intersections are projected to operate near capacity along Piilani Highway in Year 2024 with Phase 1 of the MRTP development. As noted in the percentages in Section 4, regional background growth is responsible for the majority of the impact. With improvements at the intersection of Piilani Highway and Lipoa Parkway, the project's impact can be mitigated.~~

~~Based on the operational analyses of intersections, the following are recommended to be implemented with Phase 1 to mitigate the project's impact:~~



At the intersection of Piilani Highway and Lipoa Parkway:

- ~~1. Construct an additional southbound Piilani Highway left turn lane (two total);
 - ~~a. Widen westbound Lipoa Parkway to provide for left, through, and right turn lanes;~~
 - ~~b. Widen and/or restripe eastbound Lipoa Street to provide left, through, and right turn lanes;~~~~
- ~~2. Adjust the signal timing at the intersection of Liloa Drive and Lipoa Street to better serve the anticipated traffic pattern; and~~
- ~~3. Connect Hookena Street, as a two-lane roadway to Piilani Highway as a right in/right out.~~

~~Prior to these improvements, update this Traffic Impact Analysis Report to assess actual conditions against projections, and adjust recommendations accordingly.~~

Scenario 3 – Build with MRTP Roadway Improvements

The Build with Project Roadway Improvements scenario represents the Build scenario with additional transportation improvements committed by MRTP. As described in the Build Scenario, Phase 1 consists of residential, mixed-use commercial, and the employment core along with an elementary school and business hotel.

Future Roadways

The roadway network assumptions are nearly identical to Scenario 2. Additional improvements assumed to be the responsibility of MRTP are included. These are:

Piilani Highway/Hookena Street Access

- Construct 2-lane Hookena Street from within MRTP to intersect Piilani Highway across from East Waipuiani Road;
- Configure the westbound Hookena approach as a right-in/right-out access with stop control;
- Provide acceleration and deceleration lanes to and from Piilani Highway;



- Maintain existing delineators on Piilani Highway to prevent left turns from East Waipuilani Road or Hookena Street from crossing the center line of Piilani Highway.

Piilani Highway/Piikea Avenue

- Construct an additional eastbound Piikea Avenue left turn lane (two total);
- Retime the traffic signal accordingly to optimize the intersection operation.

Piilani Highway/Lipoa Parkway

- Construct an additional southbound Piilani left turn lane (two total);
- Widen westbound Lipoa Parkway to provide for left, through, and right turn lanes;
- Widen and/or restripe eastbound Lipoa Street to provide left, through, and right turn lanes;
- Adjust signal timing and phasing to provide leading protected left turn phases for the east and westbound Lipoa left turn movements;
- Add the missing crosswalk on north Piilani leg of the intersection to improve pedestrian connectivity.

Trip Generation

The trip generation for Scenario 3 is shown in Table 10.

Trip Assignment

The traffic generated by the proposed MRTP Development was directionally distributed and assigned to the future roadway network.

Total Traffic

The traffic generated by the MRTP development was added to the projected background traffic to obtain the total peak hour traffic volumes shown in Figure 7.

Scenario 3 Traffic Operations With Project

Level of Service analysis was performed on the study area intersections. These results are shown in Table 10.



Table 10 Year 2024 Build With MRTP Roadway Improvements Level of Service Scenario 3

| Scenario 3 | AM | | PM | |
|--|----------------------------|------------------|----------------------------|-------------------|
| | LOS | Delay | LOS | Delay |
| <u>Kaonoulu St & Piilani Hwy</u> | <u>D</u> | <u>51</u> | <u>F</u> | <u>120</u> |
| <u>Piilani NB Left</u> | <u>E</u> | <u>68</u> | <u>F</u> | <u>164</u> |
| <u>Piilani NB Through</u> | <u>C</u> | <u>30</u> | <u>F</u> | <u>214</u> |
| <u>Piilani NB Right</u> | <u>B</u> | <u>11</u> | <u>C</u> | <u>30</u> |
| <u>Piilani SB Left</u> | <u>D</u> | <u>52</u> | <u>F</u> | <u>139</u> |
| <u>Piilani SB Through</u> | <u>E</u> | <u>74</u> | <u>E</u> | <u>63</u> |
| <u>Piilani SB Right</u> | <u>A</u> | <u>9</u> | <u>B</u> | <u>16</u> |
| <u>Kaonoulu EB Left</u> | <u>D</u> | <u>52</u> | <u>E</u> | <u>56</u> |
| <u>Kaonoulu EB Through</u> | <u>E</u> | <u>58</u> | <u>F</u> | <u>68</u> |
| <u>Kaonoulu EB Right</u> | <u>A</u> | <u>0</u> | <u>A</u> | <u>0</u> |
| <u>Kaonoulu WB Left</u> | <u>D</u> | <u>53</u> | <u>F</u> | <u>142</u> |
| <u>Kaonoulu WB Through</u> | <u>D</u> | <u>53</u> | <u>E</u> | <u>65</u> |
| <u>Kaonoulu WB Right</u> | <u>D</u> | <u>51</u> | <u>D</u> | <u>53</u> |
| <u>Kulanihakoi St & Piilani Hwy</u> | <u>E</u> | <u>63</u> | <u>E</u> | <u>61</u> |
| <u>Piilani NB Left</u> | <u>E</u> | <u>67</u> | <u>E</u> | <u>71</u> |
| <u>Piilani NB Through</u> | <u>D</u> | <u>41</u> | <u>E</u> | <u>76</u> |
| <u>Piilani NB Right</u> | <u>A</u> | <u>0</u> | <u>A</u> | <u>0</u> |
| <u>Piilani SB Left</u> | <u>E</u> | <u>73</u> | <u>E</u> | <u>61</u> |
| <u>Piilani SB Through</u> | <u>F</u> | <u>91</u> | <u>D</u> | <u>51</u> |
| <u>Piilani SB Right</u> | <u>A</u> | <u>0</u> | <u>A</u> | <u>0</u> |
| <u>Kulanihakoi EB Left-Through</u> | <u>D</u> | <u>50</u> | <u>D</u> | <u>50</u> |
| <u>Kulanihakoi EB Right</u> | <u>A</u> | <u>0</u> | <u>A</u> | <u>0</u> |
| <u>Kulanihakoi WB Left-Through</u> | <u>F</u> | <u>81</u> | <u>E</u> | <u>60</u> |
| <u>Kulanihakoi WB Right</u> | <u>A</u> | <u>0</u> | <u>A</u> | <u>0</u> |
| <u>E. Waipuilani Rd & Piilani Hwy</u> | <u>Unsignalized</u> | | <u>Unsignalized</u> | |
| <u>E. Waipuilani EB Right</u> | <u>A</u> | <u>5</u> | <u>A</u> | <u>1</u> |
| <u>E. Waipuilani WB Right</u> | <u>A</u> | <u>3</u> | <u>A</u> | <u>2</u> |

Delay expressed in seconds per vehicle.

* Delay greater than 300 seconds per vehicle.



**Table 10 Year 2024 Build With MRTP Roadway Improvements Level of Service Scenario 3
(Continued)**

| Scenario 3 | AM | | PM | |
|--------------------------------------|-----------------|------------------|-----------------|------------------|
| | LOS | Delay | LOS | Delay |
| S. Kihei Rd & Piikea Ave | <u>A</u> | <u>10</u> | <u>B</u> | <u>18</u> |
| <u>S. Kihei NB Left</u> | <u>A</u> | <u>7</u> | <u>A</u> | <u>9</u> |
| <u>S. Kihei NB Through</u> | <u>B</u> | <u>11</u> | <u>C</u> | <u>21</u> |
| <u>S. Kihei NB Right</u> | <u>A</u> | <u>7</u> | <u>B</u> | <u>11</u> |
| <u>S. Kihei SB Left</u> | <u>A</u> | <u>5</u> | <u>B</u> | <u>13</u> |
| <u>S. Kihei SB Through-Right</u> | <u>A</u> | <u>6</u> | <u>B</u> | <u>10</u> |
| <u>Piikea WB Left-Through</u> | <u>C</u> | <u>21</u> | <u>C</u> | <u>32</u> |
| <u>Piikea WB Right</u> | <u>B</u> | <u>19</u> | <u>C</u> | <u>23</u> |
| Piikea Ave & Liloa Dr | <u>A</u> | <u>6</u> | <u>A</u> | <u>8</u> |
| <u>Liloa NB Approach</u> | <u>A</u> | <u>5</u> | <u>A</u> | <u>7</u> |
| <u>Liloa SB Approach</u> | <u>A</u> | <u>7</u> | <u>A</u> | <u>7</u> |
| <u>Piikea EB Approach</u> | <u>A</u> | <u>5</u> | <u>A</u> | <u>7</u> |
| <u>Piikea WB Approach</u> | <u>A</u> | <u>6</u> | <u>A</u> | <u>9</u> |
| Piikea Ave & Piilani Hwy | <u>D</u> | <u>44</u> | <u>E</u> | <u>58</u> |
| <u>Piilani NB Left</u> | <u>F</u> | <u>81</u> | <u>F</u> | <u>102</u> |
| <u>Piilani NB Through</u> | <u>A</u> | <u>7</u> | <u>B</u> | <u>14</u> |
| <u>Piilani SB Through</u> | <u>E</u> | <u>73</u> | <u>F</u> | <u>108</u> |
| <u>Piilani SB Right</u> | <u>B</u> | <u>14</u> | <u>D</u> | <u>41</u> |
| <u>Piikea EB Left</u> | <u>E</u> | <u>66</u> | <u>F</u> | <u>103</u> |
| <u>Piikea EB Right</u> | <u>A</u> | <u>0</u> | <u>A</u> | <u>1</u> |
| W. Lipoa St & S. Kihei Rd | <u>B</u> | <u>13</u> | <u>C</u> | <u>21</u> |
| <u>S. Kihei NB Left</u> | <u>A</u> | <u>9</u> | <u>B</u> | <u>16</u> |
| <u>S. Kihei NB Through</u> | <u>B</u> | <u>14</u> | <u>B</u> | <u>15</u> |
| <u>S. Kihei NB Right</u> | <u>B</u> | <u>10</u> | <u>A</u> | <u>8</u> |
| <u>S. Kihei SB Left</u> | <u>A</u> | <u>6</u> | <u>B</u> | <u>10</u> |
| <u>S. Kihei SB Through-Right</u> | <u>A</u> | <u>9</u> | <u>C</u> | <u>24</u> |
| <u>W. Lipoa EB Left-Through</u> | <u>B</u> | <u>20</u> | <u>C</u> | <u>29</u> |
| <u>W. Lipoa EB Right</u> | <u>B</u> | <u>19</u> | <u>C</u> | <u>27</u> |
| <u>W. Lipoa WB Left-Through</u> | <u>C</u> | <u>22</u> | <u>D</u> | <u>39</u> |
| <u>W. Lipoa WB Right</u> | <u>B</u> | <u>20</u> | <u>C</u> | <u>28</u> |



Delay expressed in seconds per vehicle.

* Delay greater than 300 seconds per vehicle.

**Table 10 Year 2024 Build With MRTP Roadway Improvements Level of Service Scenario 3
(Continued)**

| Scenario 3 | AM | | PM | |
|---|-----------------|------------------|-----------------|------------------|
| | LOS | Delay | LOS | Delay |
| <u>E. Lipoa St & Liloa Dr</u> | <u>B</u> | <u>13</u> | <u>B</u> | <u>10</u> |
| <u>Liloa NB Left</u> | <u>B</u> | <u>16</u> | <u>B</u> | <u>11</u> |
| <u>Liloa NB Through</u> | <u>B</u> | <u>17</u> | <u>B</u> | <u>12</u> |
| <u>Liloa NB Right</u> | <u>B</u> | <u>15</u> | <u>B</u> | <u>11</u> |
| <u>Liloa SB Left</u> | <u>B</u> | <u>17</u> | <u>B</u> | <u>12</u> |
| <u>Liloa SB Through</u> | <u>B</u> | <u>17</u> | <u>B</u> | <u>12</u> |
| <u>Liloa SB Right</u> | <u>B</u> | <u>15</u> | <u>B</u> | <u>11</u> |
| <u>E. Lipoa EB Left</u> | <u>B</u> | <u>11</u> | <u>A</u> | <u>10</u> |
| <u>E. Lipoa EB Through-Right</u> | <u>B</u> | <u>15</u> | <u>B</u> | <u>13</u> |
| <u>E. Lipoa WB Left</u> | <u>A</u> | <u>6</u> | <u>A</u> | <u>6</u> |
| <u>E. Lipoa WB Through</u> | <u>A</u> | <u>9</u> | <u>A</u> | <u>9</u> |
| <u>E. Lipoa WB Right</u> | <u>A</u> | <u>8</u> | <u>A</u> | <u>7</u> |
| <u>E. Lipoa St & Piilani Hwy</u> | <u>D</u> | <u>53</u> | <u>F</u> | <u>92</u> |
| <u>Piilani NB Left</u> | <u>E</u> | <u>76</u> | <u>E</u> | <u>74</u> |
| <u>Piilani NB Through</u> | <u>E</u> | <u>57</u> | <u>F</u> | <u>118</u> |
| <u>Piilani NB Right</u> | <u>C</u> | <u>20</u> | <u>B</u> | <u>12</u> |
| <u>Piilani SB Left</u> | <u>F</u> | <u>95</u> | <u>E</u> | <u>74</u> |
| <u>Piilani SB Through</u> | <u>D</u> | <u>36</u> | <u>F</u> | <u>118</u> |
| <u>Piilani SB Right</u> | <u>A</u> | <u>9</u> | <u>B</u> | <u>14</u> |
| <u>E. Lipoa EB Left</u> | <u>E</u> | <u>67</u> | <u>E</u> | <u>67</u> |
| <u>E. Lipoa EB Through</u> | <u>D</u> | <u>52</u> | <u>D</u> | <u>54</u> |
| <u>E. Lipoa EB Right</u> | <u>A</u> | <u>0</u> | <u>A</u> | <u>0</u> |
| <u>E. Lipoa WB Left</u> | <u>F</u> | <u>152</u> | <u>E</u> | <u>65</u> |
| <u>E. Lipoa WB Through</u> | <u>E</u> | <u>69</u> | <u>E</u> | <u>61</u> |
| <u>E. Lipoa WB Right</u> | <u>A</u> | <u>0</u> | <u>A</u> | <u>0</u> |
| <u>E. Welakahao Rd & S. Kihei Rd</u> | <u>B</u> | <u>10</u> | <u>B</u> | <u>18</u> |
| <u>S. Kihei NB Left</u> | <u>A</u> | <u>6</u> | <u>A</u> | <u>10</u> |
| <u>S. Kihei NB Through-Right</u> | <u>B</u> | <u>10</u> | <u>B</u> | <u>17</u> |



| | | | | |
|---|----------|-----------|----------|-----------|
| <u>S. Kihei SB Left</u> | <u>A</u> | <u>6</u> | <u>B</u> | <u>11</u> |
| <u>S. Kihei SB Through-Right</u> | <u>A</u> | <u>8</u> | <u>B</u> | <u>16</u> |
| <u>E. Welakahao EB Left-Through-Right</u> | <u>B</u> | <u>18</u> | <u>C</u> | <u>28</u> |
| <u>E. Welakahao WB Left-Through</u> | <u>B</u> | <u>19</u> | <u>D</u> | <u>44</u> |
| <u>E. Welakahao WB Right</u> | <u>B</u> | <u>17</u> | <u>C</u> | <u>26</u> |

Delay expressed in seconds per vehicle.

* Delay greater than 300 seconds per vehicle.

**Table 10 Year 2024 Build With MRTP Roadway Improvements Level of Service Scenario 3
(Continued)**

| <u>Scenario 3</u> | <u>AM</u> | | <u>PM</u> | |
|--|----------------------------|--------------|----------------------------|--------------|
| | <u>LOS</u> | <u>Delay</u> | <u>LOS</u> | <u>Delay</u> |
| <u>E. Welakahao Rd & Piilani Hwy</u> | <u>Unsignalized</u> | | <u>Unsignalized</u> | |
| <u>Piilani NB Left</u> | <u>C</u> | <u>20</u> | <u>C</u> | <u>24</u> |
| <u>E. Welakahao EB Left</u> | <u>F</u> | <u>*</u> | <u>F</u> | <u>*</u> |
| <u>Old Welakahao Rd & Piilani Hwy</u> | <u>Unsignalized</u> | | <u>Unsignalized</u> | |
| <u>Piilani SB Left</u> | <u>B</u> | <u>13</u> | <u>C</u> | <u>17</u> |
| <u>Old Welakahao WB Left-Right</u> | <u>F</u> | <u>50</u> | <u>F</u> | <u>54</u> |

Delay expressed in seconds per vehicle.

* Delay greater than 300 seconds per vehicle.

As shown in Table 10 the intersection of Piilani Highway and Kaonoulu Street is projected to operate at LOS D overall during the AM peak hour. The southbound Piilani through movement is projected to operate at LOS E. During the PM peak hour, the intersection is projected to operate at LOS F overall. Multiple movements are projected to operate at LOS F. The north and southbound Piilani through movements are projected to operate at LOS F and E, respectively.

Piilani Highway’s intersection with Kulanihakoi Street is projected to operate at LOS E overall during the AM and PM peak hours.

The eastbound right turn at the intersection of Piilani Highway and East Waipuilani is projected to operate at LOS A during the AM and PM peak hours. The westbound right turn out of MRTP is also projected to operate at LOS A during the AM and PM peak hours.



The intersection of South Kihei Road and Piikea Avenue is projected to operate at LOS A during the AM peak hour and at LOS B during the PM peak hour. All movements are projected to operate at LOS C or better during the AM and PM peak hours.

All approaches at the roundabout at Liloa Drive and Piikea Avenue are projected to operate at LOS A or better during both the AM and PM peak hours.

The intersection of Piilani Highway and Piikea Avenue is projected to operate at LOS D during the AM peak hour and at LOS E during the PM peak hour. During both the AM and PM peak hours, the northbound Piilani left turn to Piikea is projected to operate at LOS F. With the project-related improvements, the eastbound Piikea left turn to Piilani is projected to operate at LOS F during the PM peak hour. The Piilani southbound through movement is projected to operate at LOS E during the AM peak hour and at LOS F during the PM peak hour.

The intersection of South Kihei Road and Lipoa Street is projected to operate at LOS B during the AM peak hour and at LOS C during the PM peak hour. All movements are projected to operate at LOS C or better during the AM peak hour and at LOS D or better during the PM peak hour.

The intersection of Liloa Drive and Lipoa Street is projected to operate at LOS B during the both the AM and PM peak hours. All movements are projected to operate at LOS B or better during both peak hours.

With project-related improvements, the intersection of Piilani Highway and Lipoa Street/Lipoa Parkway is projected to operate at LOS D during the AM peak hour and at LOS F during PM peak hour. During the AM peak hour, the north and southbound Piilani left turns are projected to operate at LOS E and F, respectively. The north and southbound Piilani through movements are projected to operate at LOS E and LOS D, respectively. During the PM peak hour, the Piilani through movements are projected to operate at LOS F. The north and southbound Piilani left turns are projected to operate at LOS E. The eastbound Lipoa left turn movements are projected to operate at LOS E-F during both peaks.

The intersection of South Kihei Road and East Welakahao Road is projected to operate at LOS B during both the AM and PM peak hours. During the AM peak hour, all move-



ments are projected to operate at LOS B or better. All movements are projected to operate at LOS D or better during the PM peak hour.

At the intersection of Piilani Highway and East Welakahao Road, the eastbound Welakahao left turn is projected to operate at LOS F during both peak hours.

At the intersection of Piilani Highway and Old Welakahao Road, the westbound Welakahao left turn is projected to operate at LOS F during both peak hours.

Scenario 4 - Build Scenario with MRTP and Regional Roadway Improvements

The Build with Project and Regional Roadway Improvements scenario represents the Build scenario with additional transportation improvements committed by MRTP as well as the Liloa Drive extension. In this scenario, it is assumed that the project-related improvements described in Scenario 3 are in place along with the Liloa Drive extension between Kaonoulu Street and Kanani Road.

As described in Scenarios 2 and 3, Phase 1 consists of residential, mixed-use commercial, and the employment core along with an elementary school and business hotel.

Future Regional Roadways

Liloa Drive from Waipuilani Road to Lokelani School is already built. According to the Maui County 2013 Capital Improvement Program budget approved by the Maui County Council, the North South Collector Road (makai collector) is budgeted from fiscal year 2015 to 2018 at a cost of \$18.2 million with two phases. Phase 1 will be the segment from Kaonoulu Street to Waipuilani Road and Phase 2 will be the segment from Lokelani School to Kanani Road. The County DPW, HDOT Maui, and the applicant held a meeting on this subject on October 16, 2012. At that meeting, the Director of Public Works said that the Mayor and his administration support construction of the roadway. We believe the Liloa Drive Extension is committed by the County and will be placed in the next Statewide Transportation Improvement Program (STIP).

Further clarifying information regarding the Mauka collector roadway is provided below. The roadway is not included in the current STIP, as it is not anticipated to be necessary for many years. However, the community and county government have carefully planned for and considered the eventual need for the road.



Maui County strongly supports an interconnected Kihei Mauka transportation network as shown in the August 13, 2012 letter (See: Table 27) A North South roadway mauka of Piilani, to be constructed as growth in the region warrants, is also identified as being supported in the 1998 Kihei-Makena Community Plan.

The Maui Island Plan also contemplates a future north south roadway. The directed growth chapter description of the Maui Research and Technology Park, states “the build-out of MRTP should be coordinated with the development of the neighboring Kihei Mauka planned growth area to ensure efficient intra- and inter-regional transportation connectivity for both motorized and non-motorized transportation”. Similar directions are included in the project descriptions of Kihei Mauka and the North Kihei residential planned growth areas to the north of MRTP. The applicant has initiated discussions with other landowners about providing a continuous in-tract mauka collector roadway as directed by the Maui Island Plan. When available, records of these discussions will be furnished for HDOT’s information.

In addition to the documents above, community testimony in support of an interconnected mauka transportation corridor has been provided to the Regional Long Range Land Transportation Plan project for Maui, and additional testimony will be provided in favor of the concept when the draft plan is circulated.

We believe the Liloa Drive Extension is committed by the County and will be placed in the next STIP. The Applicant is willing to continue to coordinate with the HDOT, the County, and other developers in the region to contribute its fair share on the Mauka Collector Road.

Trip Generation

The trip generation for Scenario 4 is shown in Table 8.

Trip Assignment

The traffic generated by the proposed MRTP Development was directionally distributed and assigned to the future roadway network and is shown in Figure 8 of the TIAR.

Total Traffic

The traffic generated by the MRTP development was added to the projected background traffic to obtain the total peak hour traffic volumes shown in Figure 9 of the TIAR. The recommended lane configurations for Scenario 4 are shown in Figure 10 of the TIAR.



Scenario 4 Traffic Operations With Project

Level of Service analysis was performed on the study area intersections. These results are shown in Table 11.

**Table 11 Year 2024 Build With MRTP and Regional Roadway Improvements
Level of Service Scenario 4**

| Scenario 4 | AM | | PM | |
|--|----------------------------|-----------|----------------------------|------------|
| | LOS | Delay | LOS | Delay |
| <u>Kaonoulu St & Piilani Hwy</u> | <u>C</u> | <u>30</u> | <u>F</u> | <u>122</u> |
| <u>Piilani NB Left</u> | <u>E</u> | <u>67</u> | <u>F</u> | <u>164</u> |
| <u>Piilani NB Through</u> | <u>C</u> | <u>21</u> | <u>F</u> | <u>122</u> |
| <u>Piilani NB Right</u> | <u>B</u> | <u>11</u> | <u>C</u> | <u>29</u> |
| <u>Piilani SB Left</u> | <u>D</u> | <u>52</u> | <u>F</u> | <u>*</u> |
| <u>Piilani SB Through</u> | <u>C</u> | <u>34</u> | <u>D</u> | <u>36</u> |
| <u>Piilani SB Right</u> | <u>A</u> | <u>9</u> | <u>B</u> | <u>16</u> |
| <u>Kaonoulu EB Left</u> | <u>D</u> | <u>51</u> | <u>E</u> | <u>56</u> |
| <u>Kaonoulu EB Through</u> | <u>E</u> | <u>57</u> | <u>F</u> | <u>84</u> |
| <u>Kaonoulu EB Right</u> | <u>A</u> | <u>0</u> | <u>A</u> | <u>0</u> |
| <u>Kaonoulu WB Left</u> | <u>D</u> | <u>52</u> | <u>F</u> | <u>142</u> |
| <u>Kaonoulu WB Through</u> | <u>D</u> | <u>53</u> | <u>E</u> | <u>65</u> |
| <u>Kaonoulu WB Right</u> | <u>D</u> | <u>50</u> | <u>D</u> | <u>53</u> |
| <u>Kulanihakoi St & Piilani Hwy</u> | <u>D</u> | <u>36</u> | <u>C</u> | <u>28</u> |
| <u>Piilani NB Left</u> | <u>E</u> | <u>66</u> | <u>E</u> | <u>71</u> |
| <u>Piilani NB Through</u> | <u>C</u> | <u>25</u> | <u>C</u> | <u>31</u> |
| <u>Piilani NB Right</u> | <u>A</u> | <u>0</u> | <u>A</u> | <u>0</u> |
| <u>Piilani SB Left</u> | <u>E</u> | <u>71</u> | <u>E</u> | <u>61</u> |
| <u>Piilani SB Through</u> | <u>D</u> | <u>45</u> | <u>C</u> | <u>25</u> |
| <u>Piilani SB Right</u> | <u>A</u> | <u>0</u> | <u>A</u> | <u>0</u> |
| <u>Kulanihakoi EB Left-Through</u> | <u>D</u> | <u>48</u> | <u>D</u> | <u>50</u> |
| <u>Kulanihakoi EB Right</u> | <u>A</u> | <u>0</u> | <u>A</u> | <u>0</u> |
| <u>Kulanihakoi WB Left-Through</u> | <u>E</u> | <u>79</u> | <u>E</u> | <u>60</u> |
| <u>Kulanihakoi WB Right</u> | <u>A</u> | <u>0</u> | <u>A</u> | <u>0</u> |
| <u>E. Waipuilani Rd & Piilani Hwy</u> | <u>Unsignalized</u> | | <u>Unsignalized</u> | |
| <u>E. Waipuilani EB Right</u> | <u>A</u> | <u>1</u> | <u>A</u> | <u>1</u> |



| | | | | |
|-------------------------------|----------|----------|----------|----------|
| <u>E. Waipuilani WB Right</u> | <u>A</u> | <u>2</u> | <u>A</u> | <u>2</u> |
|-------------------------------|----------|----------|----------|----------|

Delay expressed in seconds per vehicle.

* Delay greater than 300 seconds per vehicle.

**Table 11 Year 2024 Build With MRTP and Regional Roadway Improvements
Level of Service Scenario 4 (Continued)**

| <u>Scenario 4</u> | <u>AM</u> | | <u>PM</u> | |
|---|------------|--------------|------------|--------------|
| | <u>LOS</u> | <u>Delay</u> | <u>LOS</u> | <u>Delay</u> |
| <u>S. Kihei Rd & Piikea Ave</u> | <u>A</u> | <u>10</u> | <u>B</u> | <u>18</u> |
| <u>S. Kihei NB Left</u> | <u>A</u> | <u>7</u> | <u>A</u> | <u>9</u> |
| <u>S. Kihei NB Through</u> | <u>B</u> | <u>10</u> | <u>C</u> | <u>21</u> |
| <u>S. Kihei NB Right</u> | <u>A</u> | <u>7</u> | <u>B</u> | <u>10</u> |
| <u>S. Kihei SB Left</u> | <u>A</u> | <u>5</u> | <u>B</u> | <u>13</u> |
| <u>S. Kihei SB Through-Right</u> | <u>A</u> | <u>6</u> | <u>B</u> | <u>10</u> |
| <u>Piikea WB Left-Through</u> | <u>C</u> | <u>21</u> | <u>C</u> | <u>32</u> |
| <u>Piikea WB Right</u> | <u>B</u> | <u>19</u> | <u>C</u> | <u>23</u> |
| <u>Piikea Ave & Liloa Dr</u> | <u>B</u> | <u>14</u> | <u>C</u> | <u>23</u> |
| <u>Liloa NB Approach</u> | <u>A</u> | <u>10</u> | <u>D</u> | <u>28</u> |
| <u>Liloa SB Approach</u> | <u>C</u> | <u>20</u> | <u>C</u> | <u>23</u> |
| <u>Piikea EB Approach</u> | <u>A</u> | <u>9</u> | <u>B</u> | <u>14</u> |
| <u>Piikea WB Approach</u> | <u>B</u> | <u>10</u> | <u>C</u> | <u>21</u> |
| <u>Piikea Ave & Piilani Hwy</u> | <u>C</u> | <u>26</u> | <u>D</u> | <u>36</u> |
| <u>Piilani NB Left</u> | <u>E</u> | <u>71</u> | <u>F</u> | <u>86</u> |
| <u>Piilani NB Through</u> | <u>A</u> | <u>5</u> | <u>A</u> | <u>10</u> |
| <u>Piilani SB Through</u> | <u>C</u> | <u>35</u> | <u>D</u> | <u>53</u> |
| <u>Piilani SB Right</u> | <u>B</u> | <u>12</u> | <u>C</u> | <u>29</u> |
| <u>Piikea EB Left</u> | <u>E</u> | <u>64</u> | <u>F</u> | <u>84</u> |
| <u>Piikea EB Right</u> | <u>A</u> | <u>0</u> | <u>A</u> | <u>0</u> |
| <u>W. Lipoa St & S. Kihei Rd</u> | <u>B</u> | <u>13</u> | <u>C</u> | <u>21</u> |
| <u>S. Kihei NB Left</u> | <u>A</u> | <u>9</u> | <u>B</u> | <u>16</u> |
| <u>S. Kihei NB Through</u> | <u>B</u> | <u>14</u> | <u>B</u> | <u>14</u> |
| <u>S. Kihei NB Right</u> | <u>A</u> | <u>10</u> | <u>A</u> | <u>8</u> |
| <u>S. Kihei SB Left</u> | <u>A</u> | <u>6</u> | <u>A</u> | <u>10</u> |
| <u>S. Kihei SB Through-Right</u> | <u>A</u> | <u>9</u> | <u>C</u> | <u>24</u> |
| <u>W. Lipoa EB Left-Through</u> | <u>B</u> | <u>20</u> | <u>C</u> | <u>29</u> |
| <u>W. Lipoa EB Right</u> | <u>B</u> | <u>19</u> | <u>C</u> | <u>27</u> |

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| | | | | |
|---------------------------------|----------|-----------|----------|-----------|
| <u>W. Lipoa WB Left-Through</u> | <u>C</u> | <u>22</u> | <u>D</u> | <u>37</u> |
| <u>W. Lipoa WB Right</u> | <u>B</u> | <u>19</u> | <u>C</u> | <u>28</u> |

Delay expressed in seconds per vehicle.

* Delay greater than 300 seconds per vehicle.



**Table 11 Year 2024 Build With MRTP and Regional Roadway Improvements
Level of Service Scenario 4 (Continued)**

| Scenario 4 | AM | | PM | |
|--|----------|-----------|----------|-----------|
| | LOS | Delay | LOS | Delay |
| E. Lipoa St & Liloa Dr | <u>C</u> | <u>20</u> | <u>C</u> | <u>20</u> |
| <u>Liloa NB Left</u> | <u>B</u> | <u>17</u> | <u>B</u> | <u>12</u> |
| <u>Liloa NB Through</u> | <u>B</u> | <u>20</u> | <u>C</u> | <u>34</u> |
| <u>Liloa NB Right</u> | <u>B</u> | <u>15</u> | <u>B</u> | <u>12</u> |
| <u>Liloa SB Left</u> | <u>C</u> | <u>34</u> | <u>B</u> | <u>16</u> |
| <u>Liloa SB Through</u> | <u>C</u> | <u>23</u> | <u>C</u> | <u>25</u> |
| <u>Liloa SB Right</u> | <u>B</u> | <u>14</u> | <u>B</u> | <u>12</u> |
| <u>E. Lipoa EB Left</u> | <u>C</u> | <u>20</u> | <u>B</u> | <u>14</u> |
| <u>E. Lipoa EB Through-Right</u> | <u>C</u> | <u>25</u> | <u>B</u> | <u>18</u> |
| <u>E. Lipoa WB Left</u> | <u>B</u> | <u>13</u> | <u>A</u> | <u>8</u> |
| <u>E. Lipoa WB Through</u> | <u>B</u> | <u>16</u> | <u>B</u> | <u>12</u> |
| <u>E. Lipoa WB Right</u> | <u>B</u> | <u>14</u> | <u>B</u> | <u>10</u> |
| E. Lipoa St & Piilani Hwy | <u>D</u> | <u>46</u> | <u>D</u> | <u>51</u> |
| <u>Piilani NB Left</u> | <u>E</u> | <u>68</u> | <u>E</u> | <u>78</u> |
| <u>Piilani NB Through</u> | <u>D</u> | <u>46</u> | <u>D</u> | <u>48</u> |
| <u>Piilani NB Right</u> | <u>B</u> | <u>19</u> | <u>B</u> | <u>12</u> |
| <u>Piilani SB Left</u> | <u>E</u> | <u>75</u> | <u>E</u> | <u>77</u> |
| <u>Piilani SB Through</u> | <u>D</u> | <u>36</u> | <u>D</u> | <u>51</u> |
| <u>Piilani SB Right</u> | <u>B</u> | <u>12</u> | <u>B</u> | <u>14</u> |
| <u>E. Lipoa EB Left</u> | <u>E</u> | <u>70</u> | <u>E</u> | <u>75</u> |
| <u>E. Lipoa EB Through</u> | <u>E</u> | <u>60</u> | <u>D</u> | <u>53</u> |
| <u>E. Lipoa EB Right</u> | <u>A</u> | <u>0</u> | <u>A</u> | <u>0</u> |
| <u>E. Lipoa WB Left</u> | <u>E</u> | <u>71</u> | <u>E</u> | <u>73</u> |
| <u>E. Lipoa WB Through</u> | <u>D</u> | <u>55</u> | <u>E</u> | <u>64</u> |
| <u>E. Lipoa WB Right</u> | <u>A</u> | <u>0</u> | <u>A</u> | <u>0</u> |
| E. Welakahao Rd & S. Kihei Rd | <u>B</u> | <u>10</u> | <u>B</u> | <u>18</u> |
| <u>S. Kihei NB Left</u> | <u>A</u> | <u>6</u> | <u>A</u> | <u>9</u> |
| <u>S. Kihei NB Through-Right</u> | <u>B</u> | <u>10</u> | <u>B</u> | <u>17</u> |
| <u>S. Kihei SB Left</u> | <u>A</u> | <u>6</u> | <u>B</u> | <u>10</u> |
| <u>S. Kihei SB Through-Right</u> | <u>A</u> | <u>8</u> | <u>B</u> | <u>15</u> |



| | | | | |
|---|----------|-----------|----------|-----------|
| <u>E. Welakahao EB Left-Through-Right</u> | <u>B</u> | <u>18</u> | <u>C</u> | <u>27</u> |
| <u>E. Welakahao WB Left-Through</u> | <u>B</u> | <u>78</u> | <u>D</u> | <u>44</u> |
| <u>E. Welakahao WB Right</u> | <u>B</u> | <u>17</u> | <u>C</u> | <u>26</u> |

Delay expressed in seconds per vehicle.

* Delay greater than 300 seconds per vehicle.

Table 11 Year 2024 Build With MRTP and Regional Roadway Improvements

Level of Service Scenario 4 (Continued)

| <u>Scenario 4</u> | <u>AM</u> | | <u>PM</u> | |
|--|----------------------------|--------------|----------------------------|--------------|
| | <u>LOS</u> | <u>Delay</u> | <u>LOS</u> | <u>Delay</u> |
| <u>E. Welakahao Rd & Piilani Hwy</u> | <u>Unsignalized</u> | | <u>Unsignalized</u> | |
| <u>Piilani NB Left</u> | <u>C</u> | <u>17</u> | <u>C</u> | <u>19</u> |
| <u>E. Welakahao EB Left</u> | <u>F</u> | <u>75</u> | <u>F</u> | <u>*</u> |
| <u>Old Welakahao Rd & Piilani Hwy</u> | <u>Unsignalized</u> | | <u>Unsignalized</u> | |
| <u>Piilani SB Left</u> | <u>B</u> | <u>12</u> | <u>B</u> | <u>14</u> |
| <u>Old Welakahao WB Left-Right</u> | <u>D</u> | <u>32</u> | <u>E</u> | <u>49</u> |

Delay expressed in seconds per vehicle.

* Delay greater than 300 seconds per vehicle.

As shown above in Table 11 the intersection of Piilani Highway and Kaonoulu Street is projected to operate at LOS C overall during the AM peak hour. The Piilani through movements are projected to operate at LOS C. During the PM peak hour, the intersection is projected to operate at LOS F overall. Multiple movements are projected to operate at LOS F. The north and southbound Piilani through movements are projected to operate at LOS F and D, respectively.

Piilani Highway’s intersection with Kulanihakoi Street is projected to operate at LOS D overall during the AM peak hour and at LOS C during the PM peak hour. During both peaks, left turns and some minor street movements are projected to operate at LOS E but Piilani Highway through movements are projected to operate at LOS D or better. The eastbound right turn at the intersection of Piilani Highway and East Waipuilani is projected to operate at LOS A during the AM and PM peak hours. The westbound right turn out of MRTP is also projected to operate at LOS A during the AM and PM peak hours.



The intersection of South Kihei Road and Piikea Avenue is projected to operate at LOS A during the AM peak hour and at LOS B during the PM peak hour. All movements are projected to operate at LOS C or better during the AM and PM peak hours.

All approaches at the intersection of Liloa Drive and Piikea Avenue are projected to operate at LOS C or better during the AM peak hour and at LOS D or better during the PM peak hour.

The intersection of Piilani Highway and Piikea Avenue is projected to operate at LOS C during the AM peak hour and at LOS D during the PM peak hour. The northbound Piilani left turn to Piikea is projected to operate at LOS E and F during the AM and PM peak hours, respectively. With the project-related improvements, the eastbound Piikea left turn to Piilani is projected to operate at LOS E during the AM peak hour and at LOS F during the PM peak hour. The Piilani southbound through movement is projected to operate at LOS D or better during both peak hours.

The intersection of South Kihei Road and Lipoa Street is projected to operate at LOS B during the AM peak hour and at LOS C during the PM peak hour. All movements are projected to operate at LOS C or better during the AM peak hour and at LOS D or better during the PM peak hour.

The intersection of Liloa Drive and Lipoa Street is projected to operate at LOS C during the both the AM and PM peak hours. All movements are projected to operate at LOS C or better during both peak hours.

With project-related improvements, the intersection of Piilani Highway and Lipoa Street/Lipoa Parkway is projected to operate at LOS D during the both the AM and PM peak hours. All Piilani through movements are projected to operate at LOS D and all turning movements or minor street movements are projected to operate at LOS E or better.

The intersection of South Kihei Road and East Welakahao Road is projected to operate at LOS B during both the AM and PM peak hours. During the AM peak hour, all movements are projected to operate at LOS B or better. All movements are projected to operate at LOS D or better during the PM peak hour.



At the intersection of Piilani Highway and East Welakahao Road, the eastbound Welakahao left turn is projected to operate at LOS F during both peak hours.

At the intersection of Piilani Highway and Old Welakahao Road, the westbound Welakahao left turn is projected to operate at LOS D during the AM peak hour and at LOS E during the PM peak hour.

Summary of Results for Year 2024 Scenarios

The following issues were identified within the project study area:

The intersection of Piilani Highway and Kaonoulu Street is projected to operate at LOS F with or without MRTP. This intersection would be signalized as part of the Piilani Promenade project located on Kaonoulu Street on the mauka side of Piilani Highway. Even with double southbound left turns and double left and right turns out of makai-bound Kaonoulu Street, many turning movements at the intersection are projected to operate at LOS F for all scenarios. Even with the makai collector in place, the intersection is projected to operate at LOS F during the PM peak.

The construction of the Liloa Drive Extension (Makai collector) is necessary to relieve congestion on Piilani Highway. The makai collector is projected to improve the traffic operation on Piilani Highway to an acceptable LOS except at Kaonoulu Street during PM peak hour. Without makai collector, traffic operation on Piilani Highway would fail with or without MRTP.

Along with the Makai collector, the MRTP project-related improvements are also essential to overall traffic operations on Piilani Highway especially at the intersections with Piikea Avenue and Lipoa Parkway.

At the intersection of Piilani Highway and Piikea Avenue, the LOS for the eastbound Piikea Avenue left turn improves is projected to improve from LOS F to C during the AM peak hour with the addition of the additional eastbound left turn lane. The left turn movement is projected to operate at LOS E or F during both peak hours, but the delay is greatly decreased and the left turn queuing is not expected to spillover with the project-related improvements.



At the intersection of Piilani Highway and Lipoa Parkway, project-related improvements are projected to improve the overall LOS from F to D during both AM and PM peak hour. The left turn movement is projected to operate at LOS E during both peak hours, but the delay is greatly decreased and the left turn queuing is not expected to spill over with the project-related improvements.

Year 2034 Traffic Conditions

Phase 2 of the MRTP project is projected to be completed in the Year 2034, which was used as the basis for future traffic analysis. As described earlier, four scenarios including Scenario 1 - No Build, Scenario 2 - Build, Scenario 3 - Build with MRTP Roadway Improvements, and Scenario 4 - Build with MRTP and Regional Roadway Improvements, were analyzed.

Without Project Scenario 1 No Build

~~In order to assess the impact of Phase 2, Year 2034 was analyzed without project.~~

The No Build scenario represents the without project scenario. Only existing roads and regional roadways identified in the STIP are included.

~~Future Roadways and Transit~~

~~To address Year 2034 without and with Project conditions, it is assumed that the following infrastructure improvements are in place prior to the development:~~

- ~~1. The Liloa Drive extension would be in place between Kaonoulu Street and Kanani Road.~~
- ~~2. Kihei Upcountry Road will be in place.~~

Future Roadways

The roadway network assumptions are the same as the 2024 No Build scenario.

Projected Year 2034 Background Traffic

The Year 2034 background traffic volumes were derived using existing traffic along with trip generation obtained from the Maui Travel Demand Forecasting Model. The future Year 2034 background traffic assumes the presence of the developments described in the



2024 background conditions. ~~The projected Year 2034 background traffic volumes are shown in Figure 9 of the TIAR. The projected Scenario 1 traffic volumes are shown in Figure 11 of the TIAR. (See: Appendix G, “Traffic Impact Analysis Report”).~~

Projected Year 2034 Background Traffic Operations without the Project

~~Level of Service analysis was performed on the study area intersections. These results are shown in Table 11 below.~~

~~As shown in Table 11, the eastbound right turn at the intersection of Piilani Highway and East Waipuilani is projected to operate at LOS D during the AM peak hour. The right turn is projected to operate at LOS C during the PM peak hour.~~

~~The intersection of South Kihei Road and Piikea Avenue is projected to operate at LOS A overall during the AM peak hour and at LOS B during the PM peak hour. All movements are projected to operate at LOS C or better during both peaks.~~

~~The Year 2034 background traffic volumes were derived using existing traffic along with trip generation obtained from the Maui Travel Demand Forecasting Model.~~

~~The future Year 2034 background traffic assumes the presence of the developments described in the 2024 background conditions.~~

Scenario 1 No Build Traffic Operations

~~Level of Service analysis was performed on the study area intersections. These results are shown in Table 12.~~

Table 11, Projected Year 2034 Level of Service without Project

| 2034 Background | AM | | PM | |
|---|---------------------|----------|---------------------|-----------|
| | LOS | Delay | LOS | Delay |
| E. Waipuilani Rd & Piilani Hwy | Unsignalized | | Unsignalized | |
| E. Waipuilani EB Right | D | 30 | C | 19 |
| S. Kihei Rd & Piikea Ave | A | 9 | B | 17 |
| S. Kihei NB Left | A | 6 | A | 9 |
| S. Kihei NB Through | B | 10 | B | 19 |
| S. Kihei NB Right | A | 7 | B | 10 |
| S. Kihei SB Left | A | 5 | B | 12 |

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| 2034 Background | AM | | PM | |
|--------------------------------------|-----|-------|-----|-------|
| | LOS | Delay | LOS | Delay |
| S. Kihei SB Through Right | A | 6 | A | 10 |
| Piikea WB Left Through | C | 21 | C | 31 |
| Piikea WB Right | B | 19 | C | 22 |
| Piikea Ave & Liloa Dr | C | 15 | F | 54 |
| Liloa NB Approach | B | 13 | F | 65 |
| Liloa SB Approach | C | 21 | F | 54 |
| Piikea EB Approach | B | 11 | C | 18 |
| Piikea WB Approach | B | 13 | F | 62 |
| Piikea Ave & Piilani Hwy | D | 43 | D | 48 |
| Piilani NB Left | F | 252 | F | 123 |
| Piilani NB Through | A | 10 | C | 21 |
| Piilani SB Through | C | 29 | E | 60 |
| Piilani SB Right | B | 15 | D | 40 |
| Piikea EB Left | F | 185 | F | 113 |
| Piikea EB Right | A | 0 | A | 1 |
| W. Lipoa St & S. Kihei Rd | B | 12 | B | 20 |
| S. Kihei NB Left | A | 8 | B | 16 |
| S. Kihei NB Through | B | 13 | B | 14 |
| S. Kihei NB Right | A | 9 | A | 8 |
| S. Kihei SB Left | A | 6 | A | 9 |
| S. Kihei SB Through Right | A | 9 | C | 22 |
| W. Lipoa EB Left Through | B | 19 | C | 29 |
| W. Lipoa EB Right | B | 18 | C | 27 |
| W. Lipoa WB Left Through | B | 20 | D | 37 |
| W. Lipoa WB Right | B | 18 | C | 28 |
| E. Lipoa St & Liloa Dr | B | 15 | E | 61 |
| Liloa NB Left | B | 14 | B | 10 |
| Liloa NB Through | B | 19 | E | 75 |
| Liloa NB Right | B | 13 | A | 10 |
| Liloa SB Left | B | 16 | B | 11 |
| Liloa SB Through | B | 16 | F | 113 |
| Liloa SB Right | B | 13 | B | 10 |
| E. Lipoa EB Left | B | 15 | B | 13 |
| E. Lipoa EB Through Right | B | 18 | B | 15 |

Maui Research & Technology Park



| 2034 Background | AM | | PM | |
|--|---------------------|-----------|---------------------|-----------|
| | LOS | Delay | LOS | Delay |
| E. Lipoa WB Left | A | 8 | A | 9 |
| E. Lipoa WB Through | B | 12 | B | 13 |
| E. Lipoa WB Right | B | 11 | B | 11 |
| E. Lipoa St & Piilani Hwy | D | 51 | D | 47 |
| Piilani NB Left | F | 137 | E | 74 |
| Piilani NB Through | D | 40 | C | 33 |
| Piilani NB Right | C | 20 | B | 19 |
| Piilani SB Left | D | 51 | F | 91 |
| Piilani SB Through | E | 64 | D | 53 |
| Piilani SB Right | C | 23 | C | 32 |
| E. Lipoa EB Left Through | D | 48 | E | 65 |
| E. Lipoa EB Right | C | 26 | C | 33 |
| E. Lipoa WB Left Through | C | 25 | C | 34 |
| E. Lipoa WB Right | C | 25 | C | 33 |
| E. Welakahao Rd & S. Kihei Rd | B | 10 | B | 18 |
| S. Kihei NB Left | A | 6 | A | 9 |
| S. Kihei NB Through Right | B | 10 | B | 17 |
| S. Kihei SB Left | A | 6 | B | 11 |
| S. Kihei SB Through Right | A | 8 | B | 15 |
| E. Welakahao EB Left Through Right | B | 18 | C | 28 |
| E. Welakahao WB Left Through | B | 19 | D | 44 |
| E. Welakahao WB Right | B | 17 | C | 26 |
| E. Welakahao Rd (north) & Piilani Hwy | Unsignalized | | Unsignalized | |
| Piilani NB Left | C | 19 | B | 13 |
| E. Welakahao EB Left | F | 254 | F | 163 |
| E. Welakahao Rd (south) & Piilani Hwy | Unsignalized | | Unsignalized | |
| Piilani SB Left | B | 12 | B | 14 |
| E. Welakahao WB Left Right | E | 40 | D | 28 |

NB northbound, SB southbound, EB eastbound, WB westbound

Delay expressed in seconds per vehicle.



Table 12 Year 2034 No Build Level of Service Scenario 1

| Scenario 1 | AM | | PM | |
|--|----------------------------|------------------|----------------------------|------------------|
| | LOS | Delay | LOS | Delay |
| <u>Kaonoulu St & Piilani Hwy</u> | <u>E</u> | <u>62</u> | <u>F</u> | <u>81</u> |
| <u>Piilani NB Left</u> | <u>E</u> | <u>68</u> | <u>F</u> | <u>164</u> |
| <u>Piilani NB Through</u> | <u>C</u> | <u>25</u> | <u>F</u> | <u>111</u> |
| <u>Piilani NB Right</u> | <u>B</u> | <u>11</u> | <u>C</u> | <u>29</u> |
| <u>Piilani SB Left</u> | <u>D</u> | <u>52</u> | <u>F</u> | <u>139</u> |
| <u>Piilani SB Through</u> | <u>F</u> | <u>98</u> | <u>D</u> | <u>42</u> |
| <u>Piilani SB Right</u> | <u>A</u> | <u>9</u> | <u>C</u> | <u>16</u> |
| <u>Kaonoulu EB Left</u> | <u>D</u> | <u>52</u> | <u>E</u> | <u>56</u> |
| <u>Kaonoulu EB Through</u> | <u>E</u> | <u>58</u> | <u>F</u> | <u>84</u> |
| <u>Kaonoulu EB Right</u> | <u>A</u> | <u>0</u> | <u>A</u> | <u>0</u> |
| <u>Kaonoulu WB Left</u> | <u>D</u> | <u>53</u> | <u>F</u> | <u>142</u> |
| <u>Kaonoulu WB Through</u> | <u>D</u> | <u>53</u> | <u>E</u> | <u>65</u> |
| <u>Kaonoulu WB Right</u> | <u>D</u> | <u>51</u> | <u>D</u> | <u>53</u> |
| <u>Kulanihakoi St & Piilani Hwy</u> | <u>E</u> | <u>72</u> | <u>C</u> | <u>30</u> |
| <u>Piilani NB Left</u> | <u>E</u> | <u>67</u> | <u>E</u> | <u>71</u> |
| <u>Piilani NB Through</u> | <u>C</u> | <u>32</u> | <u>C</u> | <u>27</u> |
| <u>Piilani NB Right</u> | <u>A</u> | <u>0</u> | <u>A</u> | <u>0</u> |
| <u>Piilani SB Left</u> | <u>E</u> | <u>73</u> | <u>E</u> | <u>61</u> |
| <u>Piilani SB Through</u> | <u>F</u> | <u>115</u> | <u>C</u> | <u>33</u> |
| <u>Piilani SB Right</u> | <u>A</u> | <u>0</u> | <u>A</u> | <u>0</u> |
| <u>Kulanihakoi EB Left-Through</u> | <u>D</u> | <u>50</u> | <u>D</u> | <u>50</u> |
| <u>Kulanihakoi EB Right</u> | <u>A</u> | <u>0</u> | <u>A</u> | <u>0</u> |
| <u>Kulanihakoi WB Left-Through</u> | <u>F</u> | <u>81</u> | <u>E</u> | <u>60</u> |
| <u>Kulanihakoi WB Right</u> | <u>A</u> | <u>0</u> | <u>A</u> | <u>0</u> |
| <u>E. Waipuilani Rd & Piilani Hwy</u> | <u>Unsignalized</u> | | <u>Unsignalized</u> | |
| <u>E. Waipuilani EB Right</u> | <u>E</u> | <u>35</u> | <u>C</u> | <u>25</u> |
| <u>S. Kihei Rd & Piikea Ave</u> | <u>A</u> | <u>10</u> | <u>B</u> | <u>20</u> |
| <u>S. Kihei NB Left</u> | <u>A</u> | <u>6</u> | <u>A</u> | <u>9</u> |
| <u>S. Kihei NB Through</u> | <u>B</u> | <u>11</u> | <u>C</u> | <u>24</u> |
| <u>S. Kihei NB Right</u> | <u>A</u> | <u>7</u> | <u>B</u> | <u>10</u> |
| <u>S. Kihei SB Left</u> | <u>A</u> | <u>5</u> | <u>B</u> | <u>16</u> |
| <u>S. Kihei SB Through-Right</u> | <u>A</u> | <u>6</u> | <u>B</u> | <u>10</u> |



| | | | | |
|-------------------------------|----------|-----------|----------|-----------|
| <u>Piikea WB Left-Through</u> | <u>C</u> | <u>23</u> | <u>D</u> | <u>36</u> |
| <u>Piikea WB Right</u> | <u>B</u> | <u>20</u> | <u>C</u> | <u>25</u> |

Delay expressed in seconds per vehicle.

* Delay greater than 300 seconds per vehicle.

Table 12 Year 2034 No Build Level of Service Scenario 1 (Continued)

| <u>Scenario 1</u> | <u>AM</u> | | <u>PM</u> | |
|---|------------|--------------|------------|--------------|
| | <u>LOS</u> | <u>Delay</u> | <u>LOS</u> | <u>Delay</u> |
| <u>Piikea Ave & Liloa Dr</u> | <u>A</u> | <u>6</u> | <u>A</u> | <u>8</u> |
| <u>Liloa NB Approach</u> | <u>A</u> | <u>5</u> | <u>A</u> | <u>7</u> |
| <u>Liloa SB Approach</u> | <u>A</u> | <u>7</u> | <u>A</u> | <u>7</u> |
| <u>Piikea EB Approach</u> | <u>A</u> | <u>5</u> | <u>A</u> | <u>8</u> |
| <u>Piikea WB Approach</u> | <u>A</u> | <u>6</u> | <u>A</u> | <u>8</u> |
| <u>Piikea Ave & Piilani Hwy</u> | <u>D</u> | <u>45</u> | <u>F</u> | <u>113</u> |
| <u>Piilani NB Left</u> | <u>F</u> | <u>155</u> | <u>F</u> | <u>*</u> |
| <u>Piilani NB Through</u> | <u>A</u> | <u>10</u> | <u>B</u> | <u>13</u> |
| <u>Piilani SB Through</u> | <u>D</u> | <u>39</u> | <u>D</u> | <u>35</u> |
| <u>Piilani SB Right</u> | <u>B</u> | <u>15</u> | <u>C</u> | <u>25</u> |
| <u>Piikea EB Left</u> | <u>F</u> | <u>234</u> | <u>F</u> | <u>*</u> |
| <u>Piikea EB Right</u> | <u>A</u> | <u>0</u> | <u>A</u> | <u>1</u> |
| <u>W. Lipoa St & S. Kihei Rd</u> | <u>B</u> | <u>13</u> | <u>C</u> | <u>24</u> |
| <u>S. Kihei NB Left</u> | <u>A</u> | <u>8</u> | <u>C</u> | <u>26</u> |
| <u>S. Kihei NB Through</u> | <u>B</u> | <u>14</u> | <u>B</u> | <u>15</u> |
| <u>S. Kihei NB Right</u> | <u>A</u> | <u>9</u> | <u>A</u> | <u>8</u> |
| <u>S. Kihei SB Left</u> | <u>A</u> | <u>6</u> | <u>C</u> | <u>11</u> |
| <u>S. Kihei SB Through-Right</u> | <u>A</u> | <u>9</u> | <u>B</u> | <u>28</u> |
| <u>W. Lipoa EB Left-Through</u> | <u>B</u> | <u>20</u> | <u>D</u> | <u>36</u> |
| <u>W. Lipoa EB Right</u> | <u>B</u> | <u>19</u> | <u>C</u> | <u>33</u> |
| <u>W. Lipoa WB Left-Through</u> | <u>C</u> | <u>21</u> | <u>D</u> | <u>46</u> |
| <u>W. Lipoa WB Right</u> | <u>B</u> | <u>19</u> | <u>C</u> | <u>33</u> |
| <u>E. Lipoa St & Liloa Dr</u> | <u>B</u> | <u>13</u> | <u>A</u> | <u>10</u> |
| <u>Liloa NB Left</u> | <u>B</u> | <u>15</u> | <u>B</u> | <u>11</u> |
| <u>Liloa NB Through</u> | <u>B</u> | <u>16</u> | <u>B</u> | <u>11</u> |
| <u>Liloa NB Right</u> | <u>B</u> | <u>14</u> | <u>B</u> | <u>11</u> |
| <u>Liloa SB Left</u> | <u>B</u> | <u>15</u> | <u>B</u> | <u>11</u> |
| <u>Liloa SB Through</u> | <u>B</u> | <u>16</u> | <u>B</u> | <u>12</u> |

Maui Research & Technology Park



| | | | | |
|---------------------------------|----------|-----------|----------|-----------|
| <u>Liloa SB Right</u> | <u>B</u> | <u>14</u> | <u>B</u> | <u>11</u> |
| <u>E. Lipoa EB Left-Through</u> | <u>B</u> | <u>11</u> | <u>A</u> | <u>9</u> |
| <u>E. Lipoa EB Right</u> | <u>B</u> | <u>14</u> | <u>B</u> | <u>10</u> |
| <u>E. Lipoa WB Left</u> | <u>A</u> | <u>6</u> | <u>A</u> | <u>6</u> |
| <u>E. Lipoa WB Through</u> | <u>A</u> | <u>10</u> | <u>A</u> | <u>9</u> |
| <u>E. Lipoa WB Right</u> | <u>A</u> | <u>9</u> | <u>A</u> | <u>7</u> |

Delay expressed in seconds per vehicle.

* Delay greater than 300 seconds per vehicle.

Table 12 Year 2034 No Build Level of Service Scenario 1 (Continued)

| <u>Scenario 1</u> | <u>AM</u> | | <u>PM</u> | |
|--|---------------------|--------------|---------------------|--------------|
| | <u>LOS</u> | <u>Delay</u> | <u>LOS</u> | <u>Delay</u> |
| <u>E. Lipoa St & Piilani Hwy</u> | <u>D</u> | <u>44</u> | <u>F</u> | <u>87</u> |
| <u>Piilani NB Left</u> | <u>E</u> | <u>75</u> | <u>F</u> | <u>120</u> |
| <u>Piilani NB Through</u> | <u>C</u> | <u>35</u> | <u>E</u> | <u>70</u> |
| <u>Piilani NB Right</u> | <u>B</u> | <u>18</u> | <u>B</u> | <u>19</u> |
| <u>Piilani SB Left</u> | <u>E</u> | <u>71</u> | <u>F</u> | <u>83</u> |
| <u>Piilani SB Through</u> | <u>D</u> | <u>53</u> | <u>F</u> | <u>115</u> |
| <u>Piilani SB Right</u> | <u>C</u> | <u>24</u> | <u>C</u> | <u>30</u> |
| <u>E. Lipoa EB Left-Through</u> | <u>E</u> | <u>65</u> | <u>F</u> | <u>93</u> |
| <u>E. Lipoa EB Right</u> | <u>A</u> | <u>0</u> | <u>A</u> | <u>0</u> |
| <u>E. Lipoa WB Left-Through</u> | <u>F</u> | <u>81</u> | <u>F</u> | <u>81</u> |
| <u>E. Lipoa WB Right</u> | <u>A</u> | <u>0</u> | <u>A</u> | <u>0</u> |
| <u>E. Welakahao Rd & S. Kihei Rd</u> | <u>B</u> | <u>11</u> | <u>C</u> | <u>23</u> |
| <u>S. Kihei NB Left</u> | <u>A</u> | <u>5</u> | <u>B</u> | <u>14</u> |
| <u>S. Kihei NB Through-Right</u> | <u>B</u> | <u>11</u> | <u>C</u> | <u>22</u> |
| <u>S. Kihei SB Left</u> | <u>A</u> | <u>6</u> | <u>B</u> | <u>15</u> |
| <u>S. Kihei SB Through-Right</u> | <u>A</u> | <u>8</u> | <u>C</u> | <u>21</u> |
| <u>E. Welakahao EB Left-Through-Right</u> | <u>B</u> | <u>19</u> | <u>C</u> | <u>31</u> |
| <u>E. Welakahao WB Left-Through</u> | <u>C</u> | <u>20</u> | <u>D</u> | <u>47</u> |
| <u>E. Welakahao WB Right</u> | <u>B</u> | <u>18</u> | <u>C</u> | <u>30</u> |
| <u>E. Welakahao Rd & Piilani Hwy</u> | <u>Unsignalized</u> | | <u>Unsignalized</u> | |
| <u>Piilani NB Left</u> | <u>C</u> | <u>21</u> | <u>C</u> | <u>23</u> |
| <u>E. Welakahao EB Left</u> | <u>F</u> | <u>*</u> | <u>F</u> | <u>*</u> |
| <u>Old Welakahao Rd & Piilani Hwy</u> | <u>Unsignalized</u> | | <u>Unsignalized</u> | |
| <u>Piilani SB Left</u> | <u>B</u> | <u>14</u> | <u>C</u> | <u>19</u> |



| | | | | |
|-----------------------------|---|----|---|----|
| Old Welakahao WB Left-Right | F | 57 | F | 79 |
|-----------------------------|---|----|---|----|

Delay expressed in seconds per vehicle.

* Delay greater than 300 seconds per vehicle.

The intersection of Liloa Drive and Piikea Avenue was analyzed as a roundabout. During the AM peak hour, the intersection is projected to operate at LOS C. During the PM peak hour, the intersection is projected to operate at LOS F.

The intersection of Piilani Highway and Piikea Avenue is projected to operate at LOS D during the AM and PM peak hours. During the AM peak hour, the northbound Piilani left turn to Piikea and the eastbound Piikea left turn to Piilani are projected to operate at LOS F. The northbound Piilani left and eastbound Piikea left turn are projected to operate at LOS F during the PM peak hour. For the purpose of this analysis, the existing cycle length was used, which contributes to the intersection's overall delay.

The intersection of South Kihei Road and Lipoa Street is projected to operate at LOS B during both the AM and PM peak hours. All movements are projected to operate at LOS B or better during the AM peak hour and at LOS C or better during the PM peak hour with the exception of the westbound Lipoa left/through, which is projected to operate at LOS D.

The intersection of Liloa Drive and Lipoa Street is projected to operate at LOS B during the AM peak hour and LOS E during the PM peak hour. All movements are projected to operate at LOS B or better during the AM peak hour. During the PM peak hour, the north and southbound through movements are projected to operate at LOS E and F, respectively.

The intersection of Piilani Highway and Lipoa Street/Lipoa Parkway is projected to operate at LOS D during the AM and PM peak hours. During the AM peak hour, the northbound Piilani left turn is projected to operate at LOS F. The northbound and southbound Piilani through movements are projected to operate at LOS D and LOS E, respectively. During the PM peak hour, the northbound and southbound Piilani through movements are projected to operate at LOS C and LOS D, respectively. The north and southbound Piilani left turns are projected to operate at LOS E and LOS F, respectively.



~~The intersection of S. Kihei Road and East Welakahao Road is projected to operate at LOS B during both the AM and PM peak hours. During the AM peak hour, all movements are projected to operate at LOS B or better. All movements are projected to operate at LOS C or better during the PM peak hour with the exception of the westbound East Welakahao left/through movement.~~

~~At the north intersection of Piilani Highway and East Welakahao, the eastbound Welakahao left turn is projected to operate at LOS F during both peak hours. At the south intersection, the westbound East Welakahao approach is projected to operate at LOS E during the AM peak hour and at LOS D during the PM peak hour.~~

As shown above in Table 12, Piilani Highway's intersection with Kaonoulu Street is projected to be a four-legged, signalized intersection. The intersection is projected to operate at LOS E overall during the AM peak hour. During the PM peak hour, the intersection is projected to operate at LOS F overall. During the AM peak hour, the SB Piilani through movement is projected to operate at LOS F. During the PM peak hour, multiple movements, including the NB Piilani through movement, are projected to operate at LOS F.

Piilani Highway's intersection with Kulanihakoi Street is projected to operate at LOS E during the AM peak hour and at LOS C overall during the PM peak hour. During both peaks, multiple movements are projected to operate at LOS E. The westbound Kulanihakoi left/through movement is projected to operate at LOS F during the AM peak hour.

The eastbound right turn at the intersection of Piilani Highway and East Waipuilani is projected to operate at LOS E during the AM peak hour and at LOS C during the PM peak hour.

The intersection of South Kihei Road and Piikea Avenue is projected to operate at LOS A overall during the AM peak and at LOS B during the PM peak hour. All movements are projected to operate at LOS C or better during the AM peak hour and at LOS D or better during the PM peak hour.

The intersection of Liloa Drive and Piikea Avenue is a roundabout. All approaches are projected to operate at LOS A during both the AM and PM peak hours.



The intersection of Piilani Highway and Piikea Avenue is projected to operate at LOS D during the AM peak hour and LOS F during the PM peak hour. The northbound Piilani left turn to Piikea and the eastbound Piikea left turn to Piilani are projected to operate at LOS F during the AM and PM peak hours.

The intersection of South Kihei Road and Lipoa Street is projected to operate at LOS B during the AM peak hour and at LOS C during the PM peak hour. All movements are projected to operate at LOS B or better during the AM peak hour and at LOS D or better during the PM peak hour.

The intersection of Liloa Drive and Lipoa Street is projected to operate at LOS B during the AM peak hour and LOS A during the PM peak hour.

The intersection of Piilani Highway and Lipoa Street/Lipoa Parkway is projected to operate at LOS D during the AM peak hour and LOS F during the PM peak hour. During the AM peak hour, the north and southbound Piilani left turns are projected to operate at LOS E. The Piilani north and southbound through movements are projected to operate at LOS C and D respectively. The eastbound and westbound left/through movements are projected to operate at LOS E and F, respectively. During the PM peak hour, the north and southbound Piilani through movements are projected to operate at LOS E and F, respectively. Additional left turns and minor street movements are also projected to operate at LOS F.

The intersection of South Kihei Road and East Welakahao Road is projected to operate at LOS B during the AM and at LOS C during the PM peak hour. During the AM peak hour, all movements are projected to operate at LOS C or better. All movements are projected to operate at LOS D or better during the PM peak hour.

At the intersection of Piilani Highway and East Welakahao Road, the eastbound Welakahao left turn is projected to operate at LOS F during both peak hours.

At the intersection of Piilani Highway and Old Welakahao Road, the westbound approach is projected to operate at LOS F during both peak hours.



Recommended Mitigation for without Project Conditions

Level of Service (LOS) analysis was performed on all study area intersections for both scenarios. The LOS results are shown in Appendix C. Intersections analyzed are projected to operate at capacity along Piilani Highway in Year 2034 due to the projected regional growth and impact of the developments listed in Section III.A.2 of this report. The intersection of Piilani Highway and Piikea Avenue is projected to experience LOS F conditions for the mauka bound approach and the northbound left turn. The southbound through movements at the intersection of Piilani Highway and Lipoa Parkway is projected to operate at LOS E.

In addition, the intersection of Liloa Drive and Lipoa Parkway is projected to have LOS F turning movements unless the existing signal timing is altered to accommodate the increased north-south emphasis on Liloa Drive. The roundabout at Liloa Drive/Piikea Avenue is projected to operate near capacity during the PM peak hour. Finally, the mauka bound Welakahao intersection with Piilani Highway is projected to experience LOS F conditions due to increased volumes on Piilani Highway.

Based on the assumed background growth projections, the following improvements are recommended by the year 2034 to address without Project conditions:

- e) — Construct the mauka collector as a two-lane roadway between Mokulele Highway and a point on Piilani Highway south of MRTP;
- d) — Determine whether the addition of an additional left turn lane for the EB Piikea approach and/or the northbound Piilani approach is appropriate to address the capacity issues at the intersection of Piilani Highway/Piikea Avenue; and
- e) — Examine potential methods to increase capacity of the roundabout at the intersection of Liloa Drive/Piikea Avenue.

It is recommended that future regional traffic studies confirm the need for these improvements based upon actual operating conditions closer to the time that these improvements are constructed.

WITH PROJECT



The Year 2034 analysis year was used to analyze the impact of Phase 2 of the MRTP project (See: Figure 35, “Development Phasing Plan”). Building upon the residential, mixed-use, and employment land uses in Phase 1, Phase 2 is planned to consist of expansion of residential and employment land uses on either side of Lipoa Parkway.

Scenario 2 - Build

The Build scenario consists of the No Build scenario with Phases 1 and 2 of MRTP. The Build scenario adds MRTP development generated trips to the No Build scenario. The assumed roadway network is the same as in the No Build scenario. Building upon the residential, mixed-use, and employment land uses in Phase 1, Phase 2 is planned to consist of expansion of residential and employment land uses on either side of Lipoa Parkway as shown in Figure 2 of the TIAR. (See: Appendix G, “Traffic Impact Analysis Report”).

Future Roadways and Transit

To address Year 2034 with Project conditions, it is assumed that the following infrastructure improvements and transit services, as warranted, are in place prior to the development:

1. ~~The Liloa Drive extension would be in place between Kaonoulu Street and Kanani Road, providing additional mobility throughout the Kihei area.~~
2. ~~Kihei Upcountry Highway will be in place.~~
3. ~~The Maui Bus system will continue to serve the MRTP development, possibly increasing the number of daily scheduled stops.~~

~~Furthermore, there is a projected need for the mauka collector roadway to be constructed, providing direct access to Mokulele Highway. The mauka collector would diverge from Piilani Highway at a point south of the MRTP development. It would proceed through MRTP and continue north, eventually providing direct access to Mokulele Highway. For the purpose of this analysis, the mauka collector was analyzed as both a 2-lane and a 4-lane facility.~~

~~It was assumed that the mauka collector would not be used exclusively by the MRTP development, but would divert regional background traffic from Piilani Highway.~~



~~It is assumed that the Maui Bus system will interact with the MRTP development in some way. This may include either additional service into the MRTP property via Lipoa Parkway or a shuttle bus to one of the nearby bus stops along the Kihei bus route (such as the one at Piilani Village Shopping Center).~~

Future Roadways

The roadway network assumptions are the same as the No Build scenario.

Trip Generation

As with the Year 2024 scenario, the *Institute of Transportation Engineers (ITE), Trip Generation, 8th edition* was used to estimate the number of trips generated by the Maui R&T Park development based on land uses identified on Figure 2 of the TIAR (See: Appendix G, "Traffic Impact Analysis Report").

The Year 2034 scenario consists of Phases 1 and 2. Building upon Phase 1, Phase 2 consists of the following:

- 1,014,800 SF of Employment
- 500 Residential DU broken down as follows:
 - 100 DU Mid-Rise
 - 300 DU Single Family
 - 100 DU Townhouse

Table 13 summarizes the trips generated by the sum of Phases 1 and 2. Similar to Phase 1, low, medium, and high internal capture rates were developed to represent the internal interactions between the different land uses when Phase 2 is added to Phase 1.

For the purpose of this analysis, the low internal capture that would result in highest external trips was used. The detailed discussion is included in Appendix D. Specifically,

- 220/1536 or 14% of residential trips interacted directly with the school;
- 68/1536 or 4% of residential trips interacted directly with the commercial
- 244/2756 or 8% of employment trips interacted directly with the residential;
- 56/1318 or 2% of employment trips interacted directly with the business hotel;

~~The Year 2034 scenario consists of a portion of Phase 2 determined by LOS analysis described later in the report. 2034 conditions were analyzed to determine how much of~~



Phase 2 could be accommodated by a 2-lane mauka collector. Table 12 summarizes the trips generated by the sum of the entirety of Phase 1 and the portion of Phase 2 which can be accommodated by a 2-lane mauka collector. Residential was broken into 60% single family 20% townhouse, and 20% mid rise apartment. Internal capture rate was devised using ITE methodology. In addition, a 5% transit share and a 5% mode choice share was assumed for pedestrians and cyclists.

Table 12, Phase 2 Trip Generation Summary – 2-Lane Mauka Collector

| | | | | AM Peak | | PM Peak | |
|--------------|----------|-----------|-------|------------|------------|------------|------------|
| Land Use | ITE Code | Density | | IN | OUT | IN | OUT |
| Employment | 760 | 1,118,000 | SF | 663 | 136 | 102 | 600 |
| Retail | 750 | 100,000 | SF | 41 | 25 | 50 | 61 |
| Residential | 223 | 1,250 | DU | 103 | 240 | 272 | 203 |
| Hotel | 310 | 150 | Rooms | 23 | 12 | 23 | 26 |
| School | 520 | 102,000 | SF | 147 | 157 | 25 | 30 |
| Total | | | | 977 | 570 | 472 | 920 |

Trips generated expressed in vehicles per hour

Table 13 below summarizes the trips generated by Phase 1 and the entirety of Phase 2 combined. Internal capture rate was devised using ITE methodology. In addition, a 5% transit share and a 5% mode choice share was assumed for pedestrians and cyclists.

Table 13, Phase 2 Trip Generation Summary – 4-Lane Mauka Collector

| | | | | AM Peak | | PM Peak | |
|--------------|----------|-----------|-------|-------------|------------|------------|-------------|
| Land Use | ITE Code | Density | | IN | OUT | IN | OUT |
| Employment | 760 | 1,738,000 | SF | 926 | 190 | 143 | 525 |
| Retail | 750 | 100,000 | SF | 41 | 25 | 50 | 61 |
| Residential | 223 | 1,250 | DU | 92 | 177 | 219 | 194 |
| Hotel | 310 | 150 | Rooms | 21 | 9 | 19 | 25 |
| School | 520 | 102,000 | SF | 147 | 157 | 25 | 30 |
| Total | | | | 1227 | 558 | 456 | 1135 |

Trips generated expressed in vehicles per hour



Table 13 Phase 1 and 2 Trip Generation Summary

| Phase 2 | | | AM Peak Hour | | | PM Peak Hour | | |
|--|------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| | | | In | Out | Total | In | Out | Total |
| OFFICE | 760 | 1,738,000 SF | 1,287 | 263 | 1,550 | 203 | 1,147 | 1,350 |
| | <i>After Mode Reductions</i> | | 1,223 | 250 | 1,473 | 193 | 1,090 | 1,283 |
| RETAIL | 814 | 100,000 SF | 45 | 28 | 73 | 115 | 146 | 261 |
| | <i>After Mode Reductions</i> | | 43 | 27 | 70 | 109 | 139 | 248 |
| RESIDENTIAL | 223 | 250 DU | 28 | 61 | 99 | 63 | 46 | 109 |
| | 210 | 750 DU | 134 | 401 | 535 | 406 | 238 | 644 |
| | 230 | 250 DU | 19 | 91 | 100 | 87 | 43 | 130 |
| | <i>Residential Total</i> | | 181 | 553 | 784 | 556 | 327 | 883 |
| | <i>After Mode Reductions</i> | | 172 | 525 | 697 | 528 | 311 | 839 |
| HOTEL | 310 | 150 Rooms | 41 | 27 | 68 | 47 | 42 | 89 |
| | <i>After Mode Reductions</i> | | 39 | 26 | 65 | 45 | 40 | 85 |
| INSTITUTION | 522 | 102,000 SF | 279 | 219 | 498 | 55 | 68 | 123 |
| | <i>After Mode Reductions</i> | | 265 | 208 | 473 | 52 | 65 | 117 |
| Subtotal Trips (Before Mode Reductions) | | | 1,833 | 1,090 | 2,923 | 976 | 1,730 | 2,706 |
| Subtotal Trips (After Mode Reductions) | | | 1,742 | 1,036 | 2,778 | 927 | 1,645 | 2,572 |
| <i>Residential Internal Capture Reduction</i> | | | 80 | 213 | 293 | 143 | 89 | 232 |
| <i>Retail Internal Capture Reduction</i> | | | 6 | 10 | 16 | 84 | 35 | 119 |
| <i>Office Internal Capture Reduction</i> | | | 100 | 40 | 140 | 42 | 135 | 177 |
| <i>Institution Internal Capture Reduction</i> | | | 133 | 52 | 185 | 26 | 33 | 59 |
| <i>Hotel Internal Capture Reduction</i> | | | 10 | 14 | 24 | 24 | 27 | 51 |
| Total Internal Capture Reductions | | | 329 | 329 | 658 | 319 | 319 | 638 |
| Total External Trips | | | 1,413 | 707 | 2,120 | 608 | 1,326 | 1,934 |

Trips generated expressed in vehicles per hour

The traffic generated by the Maui R&T development was added to the projected background traffic to obtain the total peak hour traffic volumes shown in Figures 14 through 17 of the TIAR (See: Appendix G, "Traffic Impact Analysis"). Table 14 below contains MRTP's traffic as a percentage of the total traffic with the fully built out project and four lane mauka collector.

Trip Assignment

The traffic generated by the proposed MRTP Development was directionally distributed and assigned to the future roadway network. A summary of regional travel patterns



within the Kihei area was created from the Maui travel demand model. MRTTP traffic was assigned to the projected roadway network using this distribution. Internal traffic was distributed between the residential, hotel, school, employment, and retail commercial land uses. These distributions were applied to the trips generated.

As shown in Table 14, background traffic is responsible for the majority of the total peak hour traffic volumes. At the intersection of Piilani Highway and Lipoa Parkway, project traffic is projected to account for 18% and 18% of the intersection's traffic during the AM and PM peak hours, respectively. At the intersection of Piilani Highway and Piikea Avenue, project traffic is projected to account for 8% and 6% during the AM and PM peak hours, respectively. Compared to Phase 1, the project related traffic is lower along Piilani Highway due to the presence of the mauka collector. At the intersection of Piikea Avenue and Liloa Drive, project traffic is projected to account for 16% and 7% during the AM and PM peak hours, respectively. Finally, at the intersection of Liloa Drive and Lipoa Street, project traffic is projected to account for 16% and 15% during the AM and PM peak hours, respectively.

The project related traffic associated with the Kihei area makai of Piilani Highway is not projected to shift to the mauka collector. The percentage of project generated traffic processed by the four lane mauka collector north of MRTTP is projected to be 51% during the AM peak hour and 48% during the PM peak hour.

Total Traffic

The traffic generated by the Maui R&T development was added to the projected background traffic to obtain the total peak hour traffic volumes shown in Figure 12 of the TIAR.

Table 14, Phase 2 Project's Share of Total Intersection Traffic Volumes

| | | Project | Project + BG | % |
|-----------------------------------|----|---------|--------------|-----|
| East Waipuilani Rd Piilani Hwy | AM | 308 | 3417 | 9% |
| | PM | 338 | 3358 | 10% |
| Piikea Ave Piilani Hwy | AM | 338 | 4044 | 8% |
| | PM | 252 | 4238 | 6% |
| Lipoa Pkwy Piilani Hwy | AM | 688 | 3931 | 18% |
| | PM | 619 | 3470 | 18% |



| | | | | |
|-----------------------|----|-----|------|-----|
| East Welakahao Rd (N) | AM | 187 | 2459 | 8% |
| Piilani Hwy | PM | 260 | 2409 | 11% |
| East Welakahao Rd (S) | AM | 211 | 2275 | 9% |
| Piilani Hwy | PM | 252 | 2094 | 12% |
| Liloa Dr | AM | 281 | 1768 | 16% |
| Piikea Ave | PM | 156 | 2236 | 7% |
| Liloa Dr | AM | 301 | 1841 | 16% |
| Lipoa St | PM | 383 | 2593 | 15% |
| S. Kihei Rd | AM | 55 | 1462 | 4% |
| Piikea Ave | PM | 32 | 2017 | 2% |
| S. Kihei Rd | AM | 42 | 1476 | 3% |
| Lipoa St | PM | 51 | 2253 | 2% |
| S. Kihei Rd | AM | 16 | 1333 | 1% |
| East Welakahao Rd | PM | 19 | 2100 | 1% |

The project-related traffic associated with the Kihei area makai of Piilani Highway is not projected to shift to the mauka collector. The percentage of project-generated traffic processed by the two-lane mauka collector is projected to be 46% during the AM peak hour and 43% during the PM peak hour.

The AM southbound traffic north of the Maui R&T development was identified as a constraint. If the mauka collector's capacity were exceeded, the AM southbound traffic would fail first. Trips generated by the entirety of Phase 2 were calculated, after which the employment density was varied. It was determined that up to 1,180,000 SF of employment could be accommodated by a two-lane mauka collector. Assuming 723,200 SF of employment and 750 residential DU included in Phase 1, an additional 456,800 SF of employment and 500 residential DU would be possible. This would leave no additional capacity on the mauka collector or on Piilani Highway.

With a 4-lane mauka collector and all of Phase 2 built out, the mauka collector allows for an additional 600 vehicles per hour of capacity in the southbound direction during the AM peak hour. In the northbound direction during the AM peak, the mauka collector is projected to be at less than half capacity. During the PM peak, the mauka collector is also projected to be at less than half capacity in both the north and southbound directions.



Year 2034 Operations with Project

Level of Service analysis was performed on the study area intersections for both scenarios.

Scenario 2 Traffic Operations

Level of Service analysis was performed on the study area intersections. The results are shown in Table 14.

The results for the 4 lane mauka collector are shown in Table 15 below. The results for the 2 lane configuration are very similar in delay for the study area intersections. Projected 2034 lane configurations are shown in Figure 18 of the TIAR (See: Appendix G, “Traffic Impact Analysis Report”). As shown in Table 15, the eastbound right turn at the intersection of Piilani Highway and East Waipuilani is projected to operate at LOS C during both the AM and PM peaks. The westbound right turn is projected to operate at LOS C during the AM peak hour and at LOS D during the PM peak hour.

The intersection of South Kihei Road and Piikea Avenue is projected to operate at LOS A overall during the AM peak hour and at LOS B during the PM peak hour. All movements are projected to operate at LOS C or better during both peak hours.

The intersection of Liloa Drive and Piikea Avenue was analyzed as a roundabout. During the AM peak hour, the intersection is projected to operate at LOS E. During the PM peak hour, the intersection is projected to operate at LOS F.

Table 15, Projected Year 2034 Level of Service with Project

| 2034 with Phase 2 Buildout | AM | | PM | |
|---|---------------------|----------|---------------------|-----------|
| | LOS | Delay | LOS | Delay |
| E. Waipuilani Rd & Piilani Hwy | Unsignalized | | Unsignalized | |
| E. Waipuilani EB Right | C | 22 | C | 15 |
| E. Waipuilani WB Right | C | 18 | D | 30 |
| S. Kihei Rd & Piikea Ave | A | 9 | B | 17 |
| S. Kihei NB Left | A | 6 | A | 9 |
| S. Kihei NB Through | B | 10 | B | 20 |
| S. Kihei NB Right | A | 7 | A | 10 |
| S. Kihei SB Left | A | 5 | B | 13 |

Maui Research & Technology Park



| 2034 with Phase 2 Buildout | AM | | PM | |
|--------------------------------------|-----|-------|-----|-------|
| | LOS | Delay | LOS | Delay |
| S. Kihei SB Through Right | A | 6 | A | 10 |
| Piikea WB Left Through | C | 21 | C | 32 |
| Piikea WB Right | B | 19 | C | 23 |
| Piikea Ave & Liloa Dr | E | 46 | F | 81 |
| Liloa NB Approach | C | 22 | F | 109 |
| Liloa SB Approach | F | 83 | F | 66 |
| Piikea EB Approach | C | 19 | C | 19 |
| Piikea WB Approach | B | 15 | F | 94 |
| Piikea Ave & Piilani Hwy | C | 34 | D | 44 |
| Piilani NB Left | F | 97 | F | 108 |
| Piilani NB Through | B | 13 | B | 20 |
| Piilani SB Through | D | 42 | E | 56 |
| Piilani SB Right | C | 24 | D | 42 |
| Piikea EB Left | E | 78 | F | 83 |
| Piikea EB Right | A | 0 | A | 1 |
| W. Lipoa St & S. Kihei Rd | B | 13 | C | 20 |
| S. Kihei NB Left | A | 9 | B | 16 |
| S. Kihei NB Through | B | 14 | B | 14 |
| S. Kihei NB Right | A | 10 | A | 8 |
| S. Kihei SB Left | A | 6 | A | 10 |
| S. Kihei SB Through Right | A | 9 | C | 22 |
| W. Lipoa EB Left Through | C | 21 | C | 29 |
| W. Lipoa EB Right | B | 20 | C | 27 |
| W. Lipoa WB Left Through | C | 22 | D | 38 |
| W. Lipoa WB Right | C | 20 | C | 28 |
| E. Lipoa St & Liloa Dr | B | 17 | F | 82 |
| Liloa NB Left | B | 15 | B | 13 |
| Liloa NB Through | B | 20 | F | 126 |
| Liloa NB Right | B | 15 | B | 13 |
| Liloa SB Left | C | 30 | B | 20 |
| Liloa SB Through | B | 16 | F | 173 |
| Liloa SB Right | B | 14 | B | 13 |
| E. Lipoa EB Left | B | 16 | B | 15 |
| E. Lipoa EB Through Right | C | 20 | B | 18 |

Maui Research & Technology Park



| 2034 with Phase 2 Buildout | AM | | PM | |
|--|---------------------|-----------|---------------------|-----------|
| | LOS | Delay | LOS | Delay |
| E. Lipoa WB Left | A | 9 | A | 8 |
| E. Lipoa WB Through | B | 13 | B | 11 |
| E. Lipoa WB Right | B | 12 | B | 11 |
| E. Lipoa St & Piilani Hwy | D | 50 | D | 54 |
| Piilani NB Left | E | 77 | E | 77 |
| Piilani NB Through | D | 44 | D | 37 |
| Piilani NB Right | C | 30 | C | 25 |
| Piilani SB Left | E | 67 | E | 74 |
| Piilani SB Through | D | 50 | E | 55 |
| Piilani SB Right | C | 33 | D | 39 |
| E. Lipoa EB Left | E | 75 | E | 73 |
| E. Lipoa EB Through | D | 38 | D | 43 |
| E. Lipoa EB Right | C | 34 | D | 40 |
| E. Lipoa WB Left | E | 74 | E | 78 |
| E. Lipoa WB Through | E | 62 | F | 79 |
| E. Lipoa WB Right | D | 54 | E | 60 |
| W. Welakahao Rd & S. Kihei Rd | B | 11 | B | 18 |
| S. Kihei NB Left | A | 6 | A | 10 |
| S. Kihei NB Through-Right | B | 10 | B | 17 |
| S. Kihei SB Left | A | 6 | B | 11 |
| S. Kihei SB Through-Right | A | 8 | B | 16 |
| W. Welakahao EB Left Through-Right | B | 18 | C | 28 |
| W. Welakahao WB Left Through | B | 20 | D | 44 |
| W. Welakahao WB Right | B | 18 | C | 26 |
| E. Welakahao Rd (north) & Piilani Hwy | Unsignalized | | Unsignalized | |
| Piilani NB Left | A | 9 | A | 7 |
| E. Welakahao EB Left | B | 13 | A | 7 |
| E. Welakahao Rd (south) & Piilani Hwy | C | 24 | E | 59 |
| Piilani NB Right Through | A | 3 | A | 3 |
| Piilani SB Left | C | 30 | C | 28 |
| Piilani SB Through | C | 29 | C | 28 |
| E. Welakahao WB Left | A | 9 | A | 7 |

Maui Research & Technology Park



| | | | | |
|---|-----|-------|-----|-------|
| 2034 with Phase 2 Buildout E. Welakahao WB Right | AM | | PM | |
| | LOS | Delay | LOS | Delay |
| | B | 13 | A | 7 |

NB- northbound, SB- southbound, EB- eastbound, WB- westbound

Delay expressed in seconds per vehicle.

* Delay is maxed out.

Table 14 Year 2034 Build Level of Service Scenario 2

| Scenario 2 | AM | | PM | |
|---|---------------------|------------|---------------------|------------|
| | LOS | Delay | LOS | Delay |
| Kaonoulu St & Piilani Hwy | F | 186 | F | 179 |
| <u>Piilani NB Left</u> | <u>E</u> | <u>68</u> | <u>F</u> | <u>127</u> |
| <u>Piilani NB Through</u> | <u>E</u> | <u>74</u> | <u>F</u> | <u>*</u> |
| <u>Piilani NB Right</u> | <u>B</u> | <u>11</u> | <u>C</u> | <u>29</u> |
| <u>Piilani SB Left</u> | <u>D</u> | <u>52</u> | <u>F</u> | <u>139</u> |
| <u>Piilani SB Through</u> | <u>F</u> | <u>299</u> | <u>F</u> | <u>119</u> |
| <u>Piilani SB Right</u> | <u>A</u> | <u>9</u> | <u>B</u> | <u>16</u> |
| <u>Kaonoulu EB Left</u> | <u>D</u> | <u>52</u> | <u>E</u> | <u>56</u> |
| <u>Kaonoulu EB Through</u> | <u>E</u> | <u>58</u> | <u>F</u> | <u>84</u> |
| <u>Kaonoulu EB Right</u> | <u>A</u> | <u>0</u> | <u>A</u> | <u>0</u> |
| <u>Kaonoulu WB Left</u> | <u>D</u> | <u>53</u> | <u>F</u> | <u>142</u> |
| <u>Kaonoulu WB Through</u> | <u>D</u> | <u>53</u> | <u>E</u> | <u>65</u> |
| <u>Kaonoulu WB Right</u> | <u>D</u> | <u>51</u> | <u>D</u> | <u>53</u> |
| Kulanihakoi St & Piilani Hwy | F | 201 | F | 120 |
| <u>Piilani NB Left</u> | <u>E</u> | <u>67</u> | <u>E</u> | <u>71</u> |
| <u>Piilani NB Through</u> | <u>F</u> | <u>97</u> | <u>F</u> | <u>154</u> |
| <u>Piilani NB Right</u> | <u>A</u> | <u>0</u> | <u>A</u> | <u>0</u> |
| <u>Piilani SB Left</u> | <u>E</u> | <u>73</u> | <u>E</u> | <u>61</u> |
| <u>Piilani SB Through</u> | <u>F</u> | <u>*</u> | <u>F</u> | <u>65</u> |
| <u>Piilani SB Right</u> | <u>A</u> | <u>0</u> | <u>A</u> | <u>0</u> |
| <u>Kulanihakoi EB Left-Through</u> | <u>D</u> | <u>50</u> | <u>D</u> | <u>50</u> |
| <u>Kulanihakoi EB Right</u> | <u>A</u> | <u>0</u> | <u>A</u> | <u>0</u> |
| <u>Kulanihakoi WB Left-Through</u> | <u>F</u> | <u>81</u> | <u>E</u> | <u>60</u> |
| <u>Kulanihakoi WB Right</u> | <u>A</u> | <u>0</u> | <u>A</u> | <u>0</u> |
| E. Waipuilani Rd & Piilani Hwy | Unsignalized | | Unsignalized | |



| | | | | |
|--|-----------------|------------------|-----------------|------------------|
| <u>E. Waipuilani EB Right</u> | <u>F</u> | <u>96</u> | <u>D</u> | <u>33</u> |
| <u>S. Kihei Rd & Piikea Ave</u> | <u>A</u> | <u>10</u> | <u>B</u> | <u>20</u> |
| <u>S. Kihei NB Left</u> | <u>A</u> | <u>6</u> | <u>A</u> | <u>9</u> |
| <u>S. Kihei NB Through</u> | <u>B</u> | <u>11</u> | <u>C</u> | <u>25</u> |
| <u>S. Kihei NB Right</u> | <u>A</u> | <u>7</u> | <u>B</u> | <u>10</u> |
| <u>S. Kihei SB Left</u> | <u>A</u> | <u>5</u> | <u>B</u> | <u>17</u> |
| <u>S. Kihei SB Through-Right</u> | <u>A</u> | <u>6</u> | <u>B</u> | <u>10</u> |
| <u>Piikea WB Left-Through</u> | <u>C</u> | <u>23</u> | <u>D</u> | <u>36</u> |
| <u>Piikea WB Right</u> | <u>B</u> | <u>20</u> | <u>C</u> | <u>26</u> |

Delay expressed in seconds per vehicle.

* Delay greater than 300 seconds per vehicle.

Table 14 Year 2034 Build Level of Service Scenario 2 (Continued)

| <u>Scenario 2</u> | <u>AM</u> | | <u>PM</u> | |
|---|-----------------|-------------------|-----------------|-------------------|
| | <u>LOS</u> | <u>Delay</u> | <u>LOS</u> | <u>Delay</u> |
| <u>Piikea Ave & Liloa Dr</u> | <u>A</u> | <u>7</u> | <u>A</u> | <u>9</u> |
| <u>Liloa NB Approach</u> | <u>A</u> | <u>6</u> | <u>A</u> | <u>9</u> |
| <u>Liloa SB Approach</u> | <u>A</u> | <u>9</u> | <u>A</u> | <u>8</u> |
| <u>Piikea EB Approach</u> | <u>A</u> | <u>6</u> | <u>A</u> | <u>8</u> |
| <u>Piikea WB Approach</u> | <u>A</u> | <u>7</u> | <u>B</u> | <u>10</u> |
| <u>Piikea Ave & Piilani Hwy</u> | <u>F</u> | <u>126</u> | <u>F</u> | <u>132</u> |
| <u>Piilani NB Left</u> | <u>F</u> | <u>209</u> | <u>F</u> | <u>*</u> |
| <u>Piilani NB Through</u> | <u>B</u> | <u>14</u> | <u>E</u> | <u>59</u> |
| <u>Piilani SB Through</u> | <u>F</u> | <u>215</u> | <u>E</u> | <u>62</u> |
| <u>Piilani SB Right</u> | <u>B</u> | <u>16</u> | <u>C</u> | <u>24</u> |
| <u>Piikea EB Left</u> | <u>F</u> | <u>234</u> | <u>F</u> | <u>*</u> |
| <u>Piikea EB Right</u> | <u>A</u> | <u>0</u> | <u>A</u> | <u>1</u> |
| <u>W. Lipoa St & S. Kihei Rd</u> | <u>B</u> | <u>13</u> | <u>C</u> | <u>25</u> |
| <u>S. Kihei NB Left</u> | <u>A</u> | <u>8</u> | <u>C</u> | <u>27</u> |
| <u>S. Kihei NB Through</u> | <u>B</u> | <u>15</u> | <u>B</u> | <u>16</u> |
| <u>S. Kihei NB Right</u> | <u>A</u> | <u>10</u> | <u>A</u> | <u>8</u> |
| <u>S. Kihei SB Left</u> | <u>A</u> | <u>6</u> | <u>B</u> | <u>12</u> |
| <u>S. Kihei SB Through-Right</u> | <u>A</u> | <u>9</u> | <u>C</u> | <u>30</u> |
| <u>W. Lipoa EB Left-Through</u> | <u>C</u> | <u>22</u> | <u>D</u> | <u>36</u> |
| <u>W. Lipoa EB Right</u> | <u>C</u> | <u>21</u> | <u>C</u> | <u>33</u> |
| <u>W. Lipoa WB Left-Through</u> | <u>C</u> | <u>24</u> | <u>D</u> | <u>48</u> |



| | | | | |
|--|-----------------|------------------|-----------------|------------------|
| <u>W. Lipoa WB Right</u> | <u>C</u> | <u>21</u> | <u>C</u> | <u>33</u> |
| <u>E. Lipoa St & Liloa Dr</u> | <u>B</u> | <u>15</u> | <u>B</u> | <u>11</u> |
| <u>Liloa NB Left</u> | <u>B</u> | <u>16</u> | <u>B</u> | <u>12</u> |
| <u>Liloa NB Through</u> | <u>B</u> | <u>17</u> | <u>B</u> | <u>13</u> |
| <u>Liloa NB Right</u> | <u>B</u> | <u>15</u> | <u>B</u> | <u>12</u> |
| <u>Liloa SB Left</u> | <u>C</u> | <u>21</u> | <u>B</u> | <u>14</u> |
| <u>Liloa SB Through</u> | <u>B</u> | <u>17</u> | <u>B</u> | <u>13</u> |
| <u>Liloa SB Right</u> | <u>B</u> | <u>15</u> | <u>B</u> | <u>12</u> |
| <u>E. Lipoa EB Left-Through</u> | <u>B</u> | <u>14</u> | <u>B</u> | <u>11</u> |
| <u>E. Lipoa EB Right</u> | <u>B</u> | <u>18</u> | <u>B</u> | <u>14</u> |
| <u>E. Lipoa WB Left</u> | <u>A</u> | <u>8</u> | <u>A</u> | <u>5</u> |
| <u>E. Lipoa WB Through</u> | <u>B</u> | <u>11</u> | <u>A</u> | <u>8</u> |
| <u>E. Lipoa WB Right</u> | <u>B</u> | <u>10</u> | <u>A</u> | <u>7</u> |

Delay expressed in seconds per vehicle.

* Delay greater than 300 seconds per vehicle.

Table 14 Year 2034 Scenario 2 Build Level of Service Scenario 2 (Continued)

| <u>Scenario 2</u> | <u>AM</u> | | <u>PM</u> | |
|---|-----------------|------------------|-----------------|-------------------|
| | <u>LOS</u> | <u>Delay</u> | <u>LOS</u> | <u>Delay</u> |
| <u>E. Lipoa St & Piilani Hwy</u> | <u>F</u> | <u>*</u> | <u>F</u> | <u>299</u> |
| <u>Piilani NB Left</u> | <u>F</u> | <u>107</u> | <u>F</u> | <u>139</u> |
| <u>Piilani NB Through</u> | <u>E</u> | <u>68</u> | <u>F</u> | <u>105</u> |
| <u>Piilani NB Right</u> | <u>C</u> | <u>30</u> | <u>C</u> | <u>25</u> |
| <u>Piilani SB Left</u> | <u>F</u> | <u>*</u> | <u>F</u> | <u>*</u> |
| <u>Piilani SB Through</u> | <u>F</u> | <u>114</u> | <u>F</u> | <u>142</u> |
| <u>Piilani SB Right</u> | <u>C</u> | <u>34</u> | <u>C</u> | <u>33</u> |
| <u>E. Lipoa EB Left-Through</u> | <u>F</u> | <u>339</u> | <u>F</u> | <u>231</u> |
| <u>E. Lipoa EB Right</u> | <u>A</u> | <u>0</u> | <u>A</u> | <u>0</u> |
| <u>E. Lipoa WB Left-Through</u> | <u>F</u> | <u>*</u> | <u>F</u> | <u>*</u> |
| <u>E. Lipoa WB Right</u> | <u>A</u> | <u>1</u> | <u>A</u> | <u>2</u> |
| <u>E. Welakahao Rd & S. Kihei Rd</u> | <u>B</u> | <u>11</u> | <u>C</u> | <u>24</u> |
| <u>S. Kihei NB Left</u> | <u>A</u> | <u>5</u> | <u>B</u> | <u>15</u> |
| <u>S. Kihei NB Through-Right</u> | <u>B</u> | <u>11</u> | <u>C</u> | <u>23</u> |
| <u>S. Kihei SB Left</u> | <u>A</u> | <u>6</u> | <u>B</u> | <u>16</u> |
| <u>S. Kihei SB Through-Right</u> | <u>A</u> | <u>8</u> | <u>C</u> | <u>22</u> |
| <u>E. Welakahao EB Left-Through-Right</u> | <u>B</u> | <u>19</u> | <u>C</u> | <u>31</u> |



| | | | | |
|--|----------------------------|------------|----------------------------|------------|
| <u>E. Welakahao WB Left-Through</u> | <u>C</u> | <u>21</u> | <u>D</u> | <u>47</u> |
| <u>E. Welakahao WB Right</u> | <u>B</u> | <u>18</u> | <u>C</u> | <u>30</u> |
| <u>E. Welakahao Rd & Piilani Hwy</u> | <u>Unsignalized</u> | | <u>Unsignalized</u> | |
| <u>Piilani NB Left</u> | <u>D</u> | <u>25</u> | <u>E</u> | <u>45</u> |
| <u>E. Welakahao EB Left</u> | <u>F</u> | <u>*</u> | <u>F</u> | <u>*</u> |
| <u>Old Welakahao Rd & Piilani Hwy</u> | <u>Unsignalized</u> | | <u>Unsignalized</u> | |
| <u>Piilani SB Left</u> | <u>C</u> | <u>17</u> | <u>C</u> | <u>21</u> |
| <u>Old Welakahao WB Left-Right</u> | <u>F</u> | <u>137</u> | <u>F</u> | <u>142</u> |

Delay expressed in seconds per vehicle.

* Delay greater than 300 seconds per vehicle.

The intersection of Piilani Highway and Piikea Avenue is projected to operate at LOS C during the AM peak hour and LOS D during the PM peak hour. During the AM peak hour, the eastbound Piikea left turn to Piilani and the northbound Piilani left turn to Piikea are projected to operate at LOS E and F, respectively. The northbound Piilani left and eastbound Piikea left turn are projected to operate at LOS F during the PM peak hour. For the purpose of this analysis, the existing cycle length was used, which contributes to the intersection's overall delay.

The intersection of South Kihei Road and Lipoa Street is projected to operate at LOS B during the AM peak hour and at LOS C during the PM peak hour. All movements are projected to operate at LOS C or better during the AM peak hour and at LOS C or better during the PM peak hour with the exception of the westbound Lipoa left/through, which is projected to operate at LOS D.

The intersection of Liloa Drive and Lipoa Street is projected to operate at LOS B during the AM peak hour and LOS F during the PM peak hour. All movements are projected to operate at LOS C or better during the AM peak hour. During the PM peak hour, the north and southbound through movements are projected to operate at LOS F.

The intersection of Piilani Highway and Lipoa Street/Lipoa Parkway is projected to require double southbound Piilani left turns and widening and channelization of the eastbound and westbound Lipoa approaches. The intersection is projected to operate at LOS D during the AM and PM peak hours. During the AM peak hour, the Piilani left turns are projected to operate at LOS E along with many of the Lipoa movements.



Piilani through movements are projected to operate at LOS D. During the PM peak hour, the Piilani left turns are projected to operate at LOS E along with many of the Lipoa movements. The northbound Piilani through movement operates at LOS D, while the southbound Piilani through movement operates at LOS E.

The intersection of South Kihei Road and East Welakahao Road is projected to operate at LOS B during both the AM and PM peak hours. During the AM peak hour, all movements are projected to operate at LOS B or better. All movements are projected to operate at LOS C or better during the PM peak hour with the exception of the westbound East Welakahao left/through movement.

At the north intersection of Piilani Highway and E. Welakahao, the eastbound Welakahao left turn is projected to operate at LOS F during the PM peak hour. The south intersection was analyzed as a signalized intersection. At the south intersection, the intersection is projected to operate at LOS A during the AM and PM peak hours.

As shown in Table 14, Piilani Highway's intersection with Kaonoulu Street is projected to operate at LOS F overall during the AM and PM peak hours. During the AM peak hour, the southbound Piilani through movement is projected to operate at LOS F with a high delay. During PM peak hour, multiple movements, including the north and southbound Piilani through movements, are projected to operate at LOS F.

Piilani Highway's intersection with Kulanihakoi Street is projected to operate at LOS F overall during the AM and PM peak hours. During both peaks, multiple movements are projected to operate at LOS F, including the north and southbound Piilani Highway through movements. The eastbound right turn at the intersection of Piilani Highway and East Waipuiani is projected to operate at LOS F during the AM peak hour and at LOS D during the PM peak hour.

The intersection of South Kihei Road and Piikea Avenue is projected to operate at LOS A overall during the AM peak hour and at LOS B during the PM peak hour. All movements are projected to operate at LOS C or better during the AM peak and at LOS D or better during the PM peak hour.

The intersection of Liloa Drive and Piikea Avenue is projected to operate at LOS A overall during both peak hours.



The intersection of Piilani Highway and Piikea Avenue is projected to operate at LOS F during the during both the AM and PM peak hours. The southbound Piilani through movement, the northbound Piilani left turn movement, and the eastbound Piikea left turn movement all are projected to operate at LOS F during the AM peak hour. Both Piilani through movements are projected to operate at LOS E during the PM peak hour.

The intersection of South Kihei Road and Lipoa Street is projected to operate at LOS B during the AM peak hour and at LOS C during the PM peak hour. All movements are projected to operate at LOS C or better during the AM peak hour and at LOS D or better during the PM peak hour.

The intersection of Liloa Drive and Lipoa Street is projected to operate at LOS B during both peak hours. All movements are projected to operate at LOS C or better during the AM peak hour. All movements are projected to operate at LOS B or better during the PM peak hour.

With no project-related improvements, the intersection of Piilani Highway and Lipoa Street/Lipoa Parkway is projected to operate at LOS F during both peak hours with a high overall delay. Most critical movements on Piilani Highway and Lipoa Parkway are projected to operate at LOS F with a high delay.

The intersection of South Kihei Road and East Welakahao Road is projected to operate at LOS B during the AM peak hour and at LOS C during the PM peak hour. During the AM peak hour, all movements are projected to operate at LOS C or better. All movements are projected to operate at LOS D or better during the PM peak hour.

At the intersection of Piilani Highway and East Welakahao Road, the eastbound Welakahao left turn is projected to operate at LOS F during both peak hours.

At the intersection of Piilani Highway and Old Welakahao Road, the westbound Welakahao left turn is projected to operate at LOS F during both peak hours.

Recommended Mitigation for with Project Conditions

~~Based on assumed background growth projections together with the Project, intersections analyzed are projected to operate near capacity along Piilani Highway in Year 2034 with Phase 2 of the MRTP development and with mitigation. Regional background traf-~~



fic is responsible for the majority of the total peak hour traffic volume on the roadway network.

As with Phase 1, it is important that the Liloa Drive extension be constructed and operational to alleviate pressure on Piilani Highway. There is also a need for the mauka collector to be constructed as the conditions are projected to reach capacity in the north-south direction in Kihei. Additional capacity will be needed due to planned future developments and other regional growth. Background traffic without the project would trigger the need for a two-lane mauka collector road. Analysis of projected 2020-2034 conditions indicates that a four-lane mauka collector road will likely be warranted sometime in the Buildout of Phase 2.

Intersections analyzed are projected to operate near capacity along Piilani Highway in Year 2034 with Phase 2 of the MRTP development. While the project does contribute to the impact, the majority of the volume is due to regional growth caused by other developments in the Kihei/Wailea/Makena areas. With improvements at the intersection of Piilani Highway and Lipoa Parkway as well as the mauka collector, the project's impact can be mitigated.

The project impacts the Piilani Highway/Piikea Avenue and Liloa Drive/Piikea Avenue intersections but accounts for a relatively small percentage of the total peak hour traffic. Based on the operational analyses of intersections, the following are recommended to be implemented with Phase 2 to mitigate the project's impact:

1. Construct the portion of the mauka collector within the MRTP property;
and
2. Consider at least 2 and preferably 3 mauka-bound access points to the mauka collector within the Maui R&T development to limit congestion at the mauka collector's intersections with internal roadways.

It is recommended that future regional traffic studies confirm the need for these improvements based upon actual operating conditions closer to the time that these improvements are constructed.



Scenario 3 – Build with MRTP Roadway Improvements

This scenario represents the Build scenario with additional transportation improvements committed by MRTP.

Future Roadways

The roadway network assumptions are nearly identical to Scenario 2. Additional improvements assumed to be the responsibility of MRTP are included. These are:

Piilani Highway/Old Welakahao Road

- Construct 2-lane Old Welakahao Road as MRTP’s direct access to Piilani Highway;
- Signalize the intersection and provide a leading protected left turn phase for the southbound Piilani Highway left turn into Old Welakahao Road;
- Provide southbound left turning lane from Piilani Highway to Old Welakahao Road and westbound left turning lane from Old Welakahao Road to Piilani Highway;
- Provide acceleration and deceleration lanes to and from Piilani Highway.

Trip Generation

The trip generation for Scenario 3 is shown in Table 13.

Trip Assignment

The traffic generated by the proposed MRTP Development was directionally distributed and assigned to the future roadway network.

Total Traffic

The traffic generated by the MRTP development was added to the projected background traffic to obtain the total peak hour traffic volumes shown in Figure 13.

Scenario 3 Traffic Operations

Level of Service analysis was performed on the study area intersections. These results are shown in Table 15.



Table 15 Year 2034 Build With MRTP Roadway Improvements Level of Service Scenario 3

| Scenario 3 | AM | | PM | |
|---|---------------------|------------|---------------------|------------|
| | LOS | Delay | LOS | Delay |
| Kaonoulu St & Piilani Hwy | F | 186 | F | 184 |
| Piilani NB Left | E | 68 | F | 164 |
| Piilani NB Through | E | 74 | F | * |
| Piilani NB Right | B | 11 | C | 30 |
| Piilani SB Left | D | 52 | F | 139 |
| Piilani SB Through | F | 299 | F | 119 |
| Piilani SB Right | A | 9 | B | 16 |
| Kaonoulu EB Left | D | 52 | E | 56 |
| Kaonoulu EB Through | E | 58 | F | 84 |
| Kaonoulu EB Right | A | 0 | A | 0 |
| Kaonoulu WB Left | D | 53 | F | 142 |
| Kaonoulu WB Through | D | 53 | E | 65 |
| Kaonoulu WB Right | D | 51 | D | 54 |
| Kulanihakoi St & Piilani Hwy | F | 201 | F | 120 |
| Piilani NB Left | E | 67 | E | 71 |
| Piilani NB Through | F | 97 | F | 154 |
| Piilani NB Right | A | 0 | A | 0 |
| Piilani SB Left | E | 73 | E | 61 |
| Piilani SB Through | F | * | F | 95 |
| Piilani SB Right | A | 0 | A | 0 |
| Kulanihakoi EB Left-Through | D | 50 | D | 50 |
| Kulanihakoi EB Right | A | 0 | A | 0 |
| Kulanihakoi WB Left-Through | F | 81 | E | 60 |
| Kulanihakoi WB Right | A | 0 | A | 0 |
| E. Waipuilani Rd & Piilani Hwy | Unsignalized | | Unsignalized | |
| E. Waipuilani EB Right | A | 2 | A | 1 |
| E. Waipuilani WB Right | A | 2 | A | 3 |

Delay expressed in seconds per vehicle.

* Delay greater than 300 seconds per vehicle.



Table 15 Year 2034 Build With MRTP Roadway Improvements Level of Service Scenario 3
(Continued)

| Scenario 3 | AM | | PM | |
|--------------------------------------|----------|------------|----------|------------|
| | LOS | Delay | LOS | Delay |
| S. Kihei Rd & Piikea Ave | <u>A</u> | <u>10</u> | <u>B</u> | <u>20</u> |
| <u>S. Kihei NB Left</u> | <u>A</u> | <u>6</u> | <u>A</u> | <u>9</u> |
| <u>S. Kihei NB Through</u> | <u>B</u> | <u>11</u> | <u>C</u> | <u>25</u> |
| <u>S. Kihei NB Right</u> | <u>A</u> | <u>7</u> | <u>B</u> | <u>10</u> |
| <u>S. Kihei SB Left</u> | <u>A</u> | <u>5</u> | <u>B</u> | <u>17</u> |
| <u>S. Kihei SB Through-Right</u> | <u>A</u> | <u>6</u> | <u>B</u> | <u>10</u> |
| <u>Piikea WB Left-Through</u> | <u>C</u> | <u>23</u> | <u>D</u> | <u>36</u> |
| <u>Piikea WB Right</u> | <u>B</u> | <u>20</u> | <u>C</u> | <u>26</u> |
| Piikea Ave & Liloa Dr | <u>A</u> | <u>7</u> | <u>A</u> | <u>9</u> |
| <u>Liloa NB Approach</u> | <u>A</u> | <u>6</u> | <u>A</u> | <u>9</u> |
| <u>Liloa SB Approach</u> | <u>A</u> | <u>9</u> | <u>A</u> | <u>8</u> |
| <u>Piikea EB Approach</u> | <u>A</u> | <u>6</u> | <u>A</u> | <u>8</u> |
| <u>Piikea WB Approach</u> | <u>A</u> | <u>7</u> | <u>B</u> | <u>10</u> |
| Piikea Ave & Piilani Hwy | <u>F</u> | <u>125</u> | <u>F</u> | <u>102</u> |
| <u>Piilani NB Left</u> | <u>F</u> | <u>93</u> | <u>F</u> | <u>135</u> |
| <u>Piilani NB Through</u> | <u>A</u> | <u>9</u> | <u>D</u> | <u>35</u> |
| <u>Piilani SB Through</u> | <u>F</u> | <u>235</u> | <u>F</u> | <u>217</u> |
| <u>Piilani SB Right</u> | <u>B</u> | <u>17</u> | <u>D</u> | <u>49</u> |
| <u>Piikea EB Left</u> | <u>E</u> | <u>68</u> | <u>F</u> | <u>117</u> |
| <u>Piikea EB Right</u> | <u>A</u> | <u>0</u> | <u>A</u> | <u>1</u> |
| W. Lipoa St & S. Kihei Rd | <u>B</u> | <u>13</u> | <u>C</u> | <u>25</u> |
| <u>S. Kihei NB Left</u> | <u>A</u> | <u>8</u> | <u>C</u> | <u>27</u> |
| <u>S. Kihei NB Through</u> | <u>B</u> | <u>15</u> | <u>B</u> | <u>16</u> |
| <u>S. Kihei NB Right</u> | <u>A</u> | <u>10</u> | <u>A</u> | <u>8</u> |
| <u>S. Kihei SB Left</u> | <u>A</u> | <u>6</u> | <u>B</u> | <u>12</u> |
| <u>S. Kihei SB Through-Right</u> | <u>A</u> | <u>9</u> | <u>C</u> | <u>30</u> |
| <u>W. Lipoa EB Left-Through</u> | <u>C</u> | <u>22</u> | <u>D</u> | <u>36</u> |
| <u>W. Lipoa EB Right</u> | <u>C</u> | <u>21</u> | <u>C</u> | <u>33</u> |
| <u>W. Lipoa WB Left-Through</u> | <u>C</u> | <u>24</u> | <u>D</u> | <u>48</u> |
| <u>W. Lipoa WB Right</u> | <u>C</u> | <u>21</u> | <u>C</u> | <u>33</u> |

Delay expressed in seconds per vehicle.

* Delay greater than 300 seconds per vehicle.



**Table 15 Year 2034 Build With MRTP Roadway Improvements Level of Service Scenario 3
(Continued)**

| Scenario 3 | AM | | PM | |
|---|-----------------|-------------------|-----------------|-------------------|
| | LOS | Delay | LOS | Delay |
| <u>E. Lipoa St & Liloa Dr</u> | <u>B</u> | <u>15</u> | <u>B</u> | <u>11</u> |
| <u>Liloa NB Left</u> | <u>B</u> | <u>16</u> | <u>B</u> | <u>12</u> |
| <u>Liloa NB Through</u> | <u>B</u> | <u>17</u> | <u>B</u> | <u>13</u> |
| <u>Liloa NB Right</u> | <u>B</u> | <u>15</u> | <u>B</u> | <u>12</u> |
| <u>Liloa SB Left</u> | <u>C</u> | <u>21</u> | <u>B</u> | <u>14</u> |
| <u>Liloa SB Through</u> | <u>B</u> | <u>17</u> | <u>B</u> | <u>13</u> |
| <u>Liloa SB Right</u> | <u>B</u> | <u>15</u> | <u>B</u> | <u>12</u> |
| <u>E. Lipoa EB Left</u> | <u>B</u> | <u>14</u> | <u>B</u> | <u>11</u> |
| <u>E. Lipoa EB Through-Right</u> | <u>B</u> | <u>18</u> | <u>B</u> | <u>14</u> |
| <u>E. Lipoa WB Left</u> | <u>A</u> | <u>8</u> | <u>A</u> | <u>5</u> |
| <u>E. Lipoa WB Through</u> | <u>B</u> | <u>11</u> | <u>A</u> | <u>8</u> |
| <u>E. Lipoa WB Right</u> | <u>B</u> | <u>10</u> | <u>A</u> | <u>7</u> |
| <u>E. Lipoa St & Piilani Hwy</u> | <u>F</u> | <u>121</u> | <u>F</u> | <u>219</u> |
| <u>Piilani NB Left</u> | <u>F</u> | <u>89</u> | <u>F</u> | <u>95</u> |
| <u>Piilani NB Through</u> | <u>F</u> | <u>134</u> | <u>F</u> | <u>*</u> |
| <u>Piilani NB Right</u> | <u>C</u> | <u>23</u> | <u>B</u> | <u>17</u> |
| <u>Piilani SB Left</u> | <u>F</u> | <u>143</u> | <u>F</u> | <u>184</u> |
| <u>Piilani SB Through</u> | <u>F</u> | <u>175</u> | <u>F</u> | <u>*</u> |
| <u>Piilani SB Right</u> | <u>B</u> | <u>13</u> | <u>B</u> | <u>18</u> |
| <u>E. Lipoa EB Left</u> | <u>F</u> | <u>108</u> | <u>E</u> | <u>77</u> |
| <u>E. Lipoa EB Through</u> | <u>D</u> | <u>51</u> | <u>D</u> | <u>48</u> |
| <u>E. Lipoa EB Right</u> | <u>A</u> | <u>0</u> | <u>A</u> | <u>0</u> |
| <u>E. Lipoa WB Left</u> | <u>F</u> | <u>83</u> | <u>F</u> | <u>90</u> |
| <u>E. Lipoa WB Through</u> | <u>E</u> | <u>71</u> | <u>F</u> | <u>111</u> |
| <u>E. Lipoa WB Right</u> | <u>A</u> | <u>0</u> | <u>A</u> | <u>0</u> |
| <u>E. Welakahao Rd & S. Kihei Rd</u> | <u>B</u> | <u>11</u> | <u>C</u> | <u>24</u> |
| <u>S. Kihei NB Left</u> | <u>A</u> | <u>5</u> | <u>B</u> | <u>15</u> |
| <u>S. Kihei NB Through-Right</u> | <u>B</u> | <u>11</u> | <u>C</u> | <u>23</u> |
| <u>S. Kihei SB Left</u> | <u>A</u> | <u>6</u> | <u>B</u> | <u>16</u> |



| | | | | |
|---|----------|-----------|----------|-----------|
| <u>S. Kihei SB Through-Right</u> | <u>A</u> | <u>8</u> | <u>C</u> | <u>22</u> |
| <u>E. Welakahao EB Left-Through-Right</u> | <u>B</u> | <u>19</u> | <u>C</u> | <u>31</u> |
| <u>E. Welakahao WB Left-Through</u> | <u>C</u> | <u>21</u> | <u>D</u> | <u>47</u> |
| <u>E. Welakahao WB Right</u> | <u>B</u> | <u>18</u> | <u>C</u> | <u>30</u> |

Delay expressed in seconds per vehicle.

* Delay greater than 300 seconds per vehicle.

**Table 15 Year 2034 Build With MRTP Roadway Improvements Level of Service Scenario 3
(Continued)**

| <u>Scenario 3</u> | <u>AM</u> | | <u>PM</u> | |
|--|----------------------------|------------------|----------------------------|------------------|
| | <u>LOS</u> | <u>Delay</u> | <u>LOS</u> | <u>Delay</u> |
| <u>E. Welakahao Rd & Piilani Hwy</u> | <u>Unsignalized</u> | | <u>Unsignalized</u> | |
| <u>Piilani NB Left</u> | <u>E</u> | <u>41</u> | <u>E</u> | <u>35</u> |
| <u>E. Welakahao EB Left</u> | <u>F</u> | <u>*</u> | <u>F</u> | <u>*</u> |
| <u>Old Welakahao Rd & Piilani Hwy</u> | <u>D</u> | <u>38</u> | <u>B</u> | <u>20</u> |
| <u>Piilani NB Through</u> | <u>D</u> | <u>37</u> | <u>C</u> | <u>23</u> |
| <u>Piilani NB Right</u> | <u>B</u> | <u>17</u> | <u>A</u> | <u>7</u> |
| <u>Piilani SB Left</u> | <u>F</u> | <u>148</u> | <u>F</u> | <u>89</u> |
| <u>Piilani SB Through</u> | <u>A</u> | <u>5</u> | <u>A</u> | <u>7</u> |
| <u>Old Welakahao WB Left</u> | <u>E</u> | <u>67</u> | <u>F</u> | <u>83</u> |
| <u>Old Welakahao WB Right</u> | <u>A</u> | <u>0</u> | <u>A</u> | <u>0</u> |

Delay expressed in seconds per vehicle.

* Delay greater than 300 seconds per vehicle.

As shown in Table 15 the intersection of Piilani Highway and Kaonoulu Street is projected to operate at LOS F overall during both the AM and PM peak hours. The southbound Piilani through movement is projected to operate at LOS F during both peaks. During the PM peak hour, multiple movements are projected to operate at LOS F, including the north and southbound Piilani through movements.

Piilani Highway’s intersection with Kulanihakoi Street is projected to operate at LOS F overall during the AM and PM peak hours. During both peaks, multiple movements are projected to operate at LOS F.

The eastbound right turn at the intersection of Piilani Highway and East Waipuilani is projected to operate at LOS A during the AM and PM peak hours. The westbound right



turn out of MRTP is also projected to operate at LOS A during the AM and PM peak hours.

The intersection of South Kihei Road and Piikea Avenue is projected to operate at LOS A during the AM peak hour and at LOS B during the PM peak hour. All movements are projected to operate at LOS C or better during the AM peak hour and at LOS D or better during the PM peak hour.

All approaches at the intersection of Liloa Drive and Piikea Avenue are projected to operate at LOS A or better during the AM peak hour and at LOS B or better during the PM peak hour.

The intersection of Piilani Highway and Piikea Avenue is projected to operate at LOS F during the AM and PM peak hours. During both peak hours, the northbound Piilani left turn to Piikea is projected to operate at LOS F. With the project-related improvements, the eastbound Piikea left turn to Piilani is projected to operate at LOS F during the PM peak hour. The Piilani southbound through movement is projected to operate at LOS F during both peak hours.

The intersection of South Kihei Road and Lipoa Street is projected to operate at LOS B during the AM peak hour and at LOS C during the PM peak hour. All movements are projected to operate at LOS C or better during the AM peak hour and at LOS D or better during the PM peak hour.

The intersection of Liloa Drive and Lipoa Street is projected to operate at LOS B during the both the AM and PM peak hours. All movements are projected to operate at LOS C or better during the AM peak hour and at LOS B or better during the PM peak hour. With project-related improvements, the intersection of Piilani Highway and Lipoa Street/Lipoa Parkway is projected to operate at LOS F during both peak hours. During both peak hours, the north and southbound Piilani left turn and through movements are projected to operate at LOS F. The Lipoa approaches also are projected to have LOS F turning movements.

The intersection of South Kihei Road and East Welakahao Road is projected to operate at LOS B during both the AM peak hour and at LOS C during the PM peak hour. During



the AM peak hour, all movements are projected to operate at LOS C or better. All movements are projected to operate at LOS D or better during the PM peak hour.

At the intersection of Piilani Highway and East Welakahao Road, the eastbound Welakahao left turn is projected to operate at LOS F during both peak hours.

As part of the project-related improvements, the intersection of Piilani Highway and Old Welakahao Road is planned to be signalized and the Old Welakahao approach widened. The intersection is projected to operate at LOS D overall during the AM peak hour and at LOS B during the PM peak hour. The southbound Piilani left turn is projected to operate at LOS F during both peak hours. The westbound Old Welakahao left is projected to operate at LOS E during the AM peak and at LOS F during the PM peak hour.

Scenario 4 - Build Scenario with MRTP and Regional Roadway Improvements

The Build with MRTP and Regional Roadway Improvements scenario represents the Build scenario with additional transportation improvements committed by MRTP as well as other regional roadway improvements. In this scenario, it is assumed that the project-related improvements described in Scenario 3 are in place along with the following additional regional roadway improvements:

- Liloa Drive extension as a two-lane roadway between Kaonoulu Street and Kanani Road is completed.
- Kihei Upcountry Road as a four-lane roadway connecting Upcountry Maui to Kihei at Kaonoulu Street;
- Mauka Collector as a four-lane roadway between Mokulele Highway and Piilani Highway at a point somewhere south of MRTP.

Future Regional Roadways

In addition to roadways committed by MRTP, the Liloa Drive extension, are assumed to be in place as discussed in Phase 1.

In addition, it is assumed that Kihei Upcountry Highway would be constructed as a four-lane roadway. This road would provide a direct connection between the Upcountry area to Piilani Highway in Kihei at Kaonoulu Street.

Furthermore, the mauka collector roadway, providing direct access to Mokulele Highway, is also assumed to be constructed. The initial configuration would be a two lane



facility connecting Mokulele Highway to Piilani Highway at a point south of MRTP. The mauka collector is not included in the current STIP, as it is not anticipated to be necessary for many years. However, the community and county government have carefully planned for and considered the eventual need for the road.

Maui County strongly supports an interconnected Kihei Mauka transportation network as shown in an August 13, 2012 letter included in Appendix F of the TIAR. (See: Appendix G, "Traffic Impact Analysis Report"). A North-South roadway mauka of Piilani, to be constructed as growth in the region warrants, is also identified as being supported in the 1998 Kihei-Makena Community Plan.

The Maui Island plan also contemplates a future north south roadway in several sections. The directed growth chapter description of the Maui Research and Technology Park, states "the build-out of MRTP should be coordinated with the development of the neighboring Kihei Mauka planned growth area to ensure efficient intra- and inter-regional transportation connectivity for both motorized and non-motorized transportation". Similar directions are included in the project descriptions of Kihei Mauka and the North Kihei residential planned growth areas to the north of MRTP. MRTP has initiated discussions with other landowners about providing a continuous in-tract mauka collector roadway as directed by the Maui Island Plan.

The mauka collector would diverge from Piilani Highway at a point south of the MRTP development. It would proceed through MRTP and continue north, eventually providing direct access to Mokulele Highway. For the purpose of this analysis, the mauka collector was analyzed as a 4-lane facility. It was assumed that the mauka collector would not be used exclusively by the MRTP development, but would divert regional background traffic from Piilani Highway.

Trip Generation

The trip generation for Scenario 4 is shown in Table 13.

Trip Assignment

The traffic generated by the proposed MRTP Development was directionally distributed and assigned to the future roadway network and are shown in Figure 14 of the TIAR. (See: Appendix G, "Traffic Impact Analysis Report").



Total Traffic

The traffic generated by the MRTP development was added to the projected background traffic to obtain the total peak hour traffic volumes shown in Figure 15 of the TIAR. The recommended lane configurations for Scenario 4 are shown in Figure 16 of the TIAR. (See: Appendix G, “Traffic Impact Analysis Report”).

Scenario 4 Traffic Operations With Project

Level of Service analysis was performed on the study area intersections. These results are shown in Table 16.

Table 16 Year 2034 Build With MRTP and Regional Roadway Improvements Level of Service Scenario 4

| <u>Scenario 4</u> | <u>AM</u> | | <u>PM</u> | |
|--|-----------------|------------------|-----------------|-------------------|
| | <u>LOS</u> | <u>Delay</u> | <u>LOS</u> | <u>Delay</u> |
| <u>Kaonoulu St & Piilani Hwy</u> | <u>C</u> | <u>33</u> | <u>F</u> | <u>115</u> |
| <u>Piilani NB Left</u> | <u>F</u> | <u>81</u> | <u>F</u> | <u>121</u> |
| <u>Piilani NB Through</u> | <u>C</u> | <u>22</u> | <u>C</u> | <u>34</u> |
| <u>Piilani NB Right</u> | <u>B</u> | <u>18</u> | <u>C</u> | <u>34</u> |
| <u>Piilani SB Left</u> | <u>E</u> | <u>58</u> | <u>F</u> | <u>535</u> |
| <u>Piilani SB Through</u> | <u>C</u> | <u>35</u> | <u>C</u> | <u>25</u> |
| <u>Piilani SB Right</u> | <u>B</u> | <u>13</u> | <u>B</u> | <u>18</u> |
| <u>Kaonoulu EB Left</u> | <u>D</u> | <u>54</u> | <u>D</u> | <u>50</u> |
| <u>Kaonoulu EB Through</u> | <u>E</u> | <u>59</u> | <u>E</u> | <u>77</u> |
| <u>Kaonoulu EB Right</u> | <u>A</u> | <u>0</u> | <u>A</u> | <u>0</u> |
| <u>Kaonoulu WB Left</u> | <u>E</u> | <u>59</u> | <u>F</u> | <u>220</u> |
| <u>Kaonoulu WB Through</u> | <u>D</u> | <u>50</u> | <u>E</u> | <u>59</u> |
| <u>Kaonoulu WB Right</u> | <u>D</u> | <u>48</u> | <u>D</u> | <u>47</u> |
| <u>Kulanihakoi St & Piilani Hwy</u> | <u>C</u> | <u>33</u> | <u>B</u> | <u>15</u> |
| <u>Piilani NB Left</u> | <u>E</u> | <u>66</u> | <u>E</u> | <u>57</u> |
| <u>Piilani NB Through</u> | <u>B</u> | <u>19</u> | <u>B</u> | <u>12</u> |
| <u>Piilani NB Right</u> | <u>A</u> | <u>0</u> | <u>A</u> | <u>0</u> |
| <u>Piilani SB Left</u> | <u>E</u> | <u>71</u> | <u>D</u> | <u>55</u> |
| <u>Piilani SB Through</u> | <u>D</u> | <u>41</u> | <u>B</u> | <u>16</u> |



| | | | | |
|--|----------------------------|-----------|----------------------------|-----------|
| <u>Piilani SB Right</u> | <u>A</u> | <u>0</u> | <u>A</u> | <u>0</u> |
| <u>Kulanihakoi EB Left-Through</u> | <u>D</u> | <u>48</u> | <u>D</u> | <u>44</u> |
| <u>Kulanihakoi EB Right</u> | <u>A</u> | <u>0</u> | <u>A</u> | <u>0</u> |
| <u>Kulanihakoi WB Left-Through</u> | <u>E</u> | <u>79</u> | <u>D</u> | <u>51</u> |
| <u>Kulanihakoi WB Right</u> | <u>A</u> | <u>0</u> | <u>A</u> | <u>0</u> |
| <u>E. Waipuilani Rd & Piilani Hwy</u> | <u>Unsignalized</u> | | <u>Unsignalized</u> | |
| <u>E. Waipuilani EB Right</u> | <u>A</u> | <u>2</u> | <u>A</u> | <u>1</u> |
| <u>E. Waipuilani WB Right</u> | <u>A</u> | <u>1</u> | <u>A</u> | <u>1</u> |

Delay expressed in seconds per vehicle.

* Delay greater than 300 seconds per vehicle.

**Table 16 Year 2034 Scenario 4 Build With MRTP and Regional Roadway Improvements
Level of Service Scenario 4 (Continued)**

| <u>Scenario 4</u> | <u>AM</u> | | <u>PM</u> | |
|--|-----------------|------------------|-----------------|------------------|
| | <u>LOS</u> | <u>Delay</u> | <u>LOS</u> | <u>Delay</u> |
| <u>S. Kihei Rd & Piikea Ave</u> | <u>A</u> | <u>10</u> | <u>B</u> | <u>18</u> |
| <u>S. Kihei NB Left</u> | <u>A</u> | <u>7</u> | <u>A</u> | <u>9</u> |
| <u>S. Kihei NB Through</u> | <u>B</u> | <u>11</u> | <u>C</u> | <u>21</u> |
| <u>S. Kihei NB Right</u> | <u>A</u> | <u>7</u> | <u>B</u> | <u>10</u> |
| <u>S. Kihei SB Left</u> | <u>A</u> | <u>5</u> | <u>B</u> | <u>13</u> |
| <u>S. Kihei SB Through-Right</u> | <u>A</u> | <u>6</u> | <u>B</u> | <u>10</u> |
| <u>Piikea WB Left-Through</u> | <u>C</u> | <u>22</u> | <u>C</u> | <u>33</u> |
| <u>Piikea WB Right</u> | <u>B</u> | <u>19</u> | <u>C</u> | <u>24</u> |
| <u>Piikea Ave & Liloa Dr</u> | <u>C</u> | <u>20</u> | <u>D</u> | <u>28</u> |
| <u>Liloa NB Approach</u> | <u>A</u> | <u>10</u> | <u>D</u> | <u>34</u> |
| <u>Liloa SB Approach</u> | <u>D</u> | <u>32</u> | <u>D</u> | <u>29</u> |
| <u>Piikea EB Approach</u> | <u>A</u> | <u>10</u> | <u>C</u> | <u>15</u> |
| <u>Piikea WB Approach</u> | <u>B</u> | <u>10</u> | <u>C</u> | <u>23</u> |
| <u>Piikea Ave & Piilani Hwy</u> | <u>C</u> | <u>22</u> | <u>D</u> | <u>35</u> |
| <u>Piilani NB Left</u> | <u>E</u> | <u>66</u> | <u>E</u> | <u>78</u> |
| <u>Piilani NB Through</u> | <u>A</u> | <u>6</u> | <u>A</u> | <u>9</u> |
| <u>Piilani SB Through</u> | <u>C</u> | <u>26</u> | <u>D</u> | <u>46</u> |
| <u>Piilani SB Right</u> | <u>B</u> | <u>14</u> | <u>C</u> | <u>33</u> |



| | | | | |
|---|-----------------|------------------|-----------------|------------------|
| <u>Piikea EB Left</u> | <u>E</u> | <u>57</u> | <u>F</u> | <u>80</u> |
| <u>Piikea EB Right</u> | <u>A</u> | <u>0</u> | <u>A</u> | <u>1</u> |
| <u>W. Lipoa St & S. Kihei Rd</u> | <u>B</u> | <u>13</u> | <u>C</u> | <u>25</u> |
| <u>S. Kihei NB Left</u> | <u>A</u> | <u>8</u> | <u>C</u> | <u>27</u> |
| <u>S. Kihei NB Through</u> | <u>B</u> | <u>15</u> | <u>B</u> | <u>16</u> |
| <u>S. Kihei NB Right</u> | <u>A</u> | <u>10</u> | <u>A</u> | <u>8</u> |
| <u>S. Kihei SB Left</u> | <u>A</u> | <u>6</u> | <u>B</u> | <u>12</u> |
| <u>S. Kihei SB Through-Right</u> | <u>A</u> | <u>9</u> | <u>C</u> | <u>30</u> |
| <u>W. Lipoa EB Left-Through</u> | <u>C</u> | <u>22</u> | <u>D</u> | <u>36</u> |
| <u>W. Lipoa EB Right</u> | <u>C</u> | <u>21</u> | <u>C</u> | <u>33</u> |
| <u>W. Lipoa WB Left-Through</u> | <u>C</u> | <u>24</u> | <u>D</u> | <u>48</u> |
| <u>W. Lipoa WB Right</u> | <u>C</u> | <u>21</u> | <u>C</u> | <u>33</u> |

Delay expressed in seconds per vehicle.

* Delay greater than 300 seconds per vehicle.

**Table 16 Year 2034 Scenario 4 Build With MRTP and Regional Roadway Improvements
Level of Service Scenario 4 (Continued)**

| Scenario 4 | AM | | PM | |
|---|-----------------|------------------|-----------------|------------------|
| | LOS | Delay | LOS | Delay |
| <u>E. Lipoa St & Liloa Dr</u> | <u>C</u> | <u>21</u> | <u>C</u> | <u>22</u> |
| <u>Liloa NB Left</u> | <u>B</u> | <u>16</u> | <u>B</u> | <u>12</u> |
| <u>Liloa NB Through</u> | <u>B</u> | <u>19</u> | <u>D</u> | <u>39</u> |
| <u>Liloa NB Right</u> | <u>B</u> | <u>15</u> | <u>B</u> | <u>12</u> |
| <u>Liloa SB Left</u> | <u>D</u> | <u>38</u> | <u>B</u> | <u>18</u> |
| <u>Liloa SB Through</u> | <u>C</u> | <u>22</u> | <u>C</u> | <u>28</u> |
| <u>Liloa SB Right</u> | <u>B</u> | <u>14</u> | <u>B</u> | <u>12</u> |
| <u>E. Lipoa EB Left</u> | <u>C</u> | <u>23</u> | <u>B</u> | <u>15</u> |
| <u>E. Lipoa EB Through-Right</u> | <u>C</u> | <u>29</u> | <u>B</u> | <u>18</u> |
| <u>E. Lipoa WB Left</u> | <u>B</u> | <u>15</u> | <u>A</u> | <u>8</u> |
| <u>E. Lipoa WB Through</u> | <u>B</u> | <u>18</u> | <u>B</u> | <u>11</u> |
| <u>E. Lipoa WB Right</u> | <u>B</u> | <u>16</u> | <u>B</u> | <u>10</u> |
| <u>E. Lipoa St & Piilani Hwy</u> | <u>C</u> | <u>35</u> | <u>D</u> | <u>48</u> |
| <u>Piilani NB Left</u> | <u>E</u> | <u>60</u> | <u>E</u> | <u>79</u> |
| <u>Piilani NB Through</u> | <u>C</u> | <u>32</u> | <u>D</u> | <u>37</u> |
| <u>Piilani NB Right</u> | <u>C</u> | <u>20</u> | <u>B</u> | <u>18</u> |



| | | | | |
|---|-----------------|------------------|-----------------|------------------|
| <u>Piilani SB Left</u> | <u>D</u> | <u>53</u> | <u>E</u> | <u>64</u> |
| <u>Piilani SB Through</u> | <u>D</u> | <u>38</u> | <u>D</u> | <u>54</u> |
| <u>Piilani SB Right</u> | <u>B</u> | <u>13</u> | <u>B</u> | <u>17</u> |
| <u>E. Lipoa EB Left</u> | <u>E</u> | <u>59</u> | <u>E</u> | <u>80</u> |
| <u>E. Lipoa EB Through</u> | <u>D</u> | <u>38</u> | <u>D</u> | <u>41</u> |
| <u>E. Lipoa EB Right</u> | <u>A</u> | <u>0</u> | <u>A</u> | <u>0</u> |
| <u>E. Lipoa WB Left</u> | <u>E</u> | <u>58</u> | <u>E</u> | <u>65</u> |
| <u>E. Lipoa WB Through</u> | <u>D</u> | <u>53</u> | <u>E</u> | <u>67</u> |
| <u>E. Lipoa WB Right</u> | <u>A</u> | <u>0</u> | <u>A</u> | <u>0</u> |
| <u>E. Welakahao Rd & S. Kihei Rd</u> | <u>B</u> | <u>11</u> | <u>C</u> | <u>24</u> |
| <u>S. Kihei NB Left</u> | <u>A</u> | <u>5</u> | <u>B</u> | <u>15</u> |
| <u>S. Kihei NB Through-Right</u> | <u>B</u> | <u>11</u> | <u>C</u> | <u>24</u> |
| <u>S. Kihei SB Left</u> | <u>A</u> | <u>6</u> | <u>B</u> | <u>16</u> |
| <u>S. Kihei SB Through-Right</u> | <u>A</u> | <u>8</u> | <u>C</u> | <u>22</u> |
| <u>E. Welakahao EB Left-Through-Right</u> | <u>B</u> | <u>20</u> | <u>B</u> | <u>31</u> |
| <u>E. Welakahao WB Left-Through</u> | <u>C</u> | <u>21</u> | <u>D</u> | <u>47</u> |
| <u>E. Welakahao WB Right</u> | <u>B</u> | <u>19</u> | <u>B</u> | <u>30</u> |

Delay expressed in seconds per vehicle.

* Delay greater than 300 seconds per vehicle.

**Table 16 Year 2034 Scenario 4 Build With MRTP and Regional Roadway Improvements
Level of Service Scenario 4 (Continued)**

| <u>Scenario 4</u> | <u>AM</u> | | <u>PM</u> | |
|--|----------------------------|------------------|----------------------------|-----------------|
| | <u>LOS</u> | <u>Delay</u> | <u>LOS</u> | <u>Delay</u> |
| <u>E. Welakahao Rd & Piilani Hwy</u> | <u>Unsignalized</u> | | <u>Unsignalized</u> | |
| <u>Piilani NB Left</u> | <u>C</u> | <u>15</u> | <u>B</u> | <u>13</u> |
| <u>E. Welakahao EB Left</u> | <u>E</u> | <u>36</u> | <u>E</u> | <u>44</u> |
| <u>Old Welakahao Rd & Piilani Hwy</u> | <u>B</u> | <u>10</u> | <u>A</u> | <u>7</u> |
| <u>Piilani NB Through</u> | <u>B</u> | <u>15</u> | <u>A</u> | <u>9</u> |
| <u>Piilani NB Right</u> | <u>B</u> | <u>11</u> | <u>A</u> | <u>5</u> |
| <u>Piilani SB Left</u> | <u>C</u> | <u>24</u> | <u>C</u> | <u>35</u> |
| <u>Piilani SB Through</u> | <u>A</u> | <u>3</u> | <u>A</u> | <u>3</u> |
| <u>Old Welakahao WB Left</u> | <u>C</u> | <u>31</u> | <u>C</u> | <u>32</u> |
| <u>Old Welakahao WB Right</u> | <u>A</u> | <u>0</u> | <u>A</u> | <u>0</u> |

Delay expressed in seconds per vehicle.

* Delay greater than 300 seconds per vehicle.



As shown in Table 16 the intersection of Piilani Highway and Kaonoulu Street is projected to operate at LOS C overall during the AM peak hour. The Piilani through movements are projected to operate at LOS C. Left turns and certain minor street movements are projected to operate at LOS E or F. During the PM peak hour, the intersection is projected to operate at LOS F overall. Multiple movements are projected to operate at LOS F. The north and southbound Piilani through movements are projected to operate at LOS C.

Piilani Highway's intersection with Kulanihakoi Street is projected to operate at LOS C overall during the AM peak hour and at LOS B during the PM peak hour. During both peaks, left turns and minor street movements are projected to operate at LOS E, but Piilani Highway through movements are projected to operate at LOS D or better.

The eastbound right turn at the intersection of Piilani Highway and East Waipuilani is projected to operate at LOS A during the AM and PM peak hours. The westbound right turn out of MRTP is also projected to operate at LOS A during the AM and PM peak hours.

The intersection of South Kihei Road and Piikea Avenue is projected to operate at LOS A during the AM peak hour and at LOS B during the PM peak hour. All movements are projected to operate at LOS C or better during the AM and PM peak hours.

All approaches at the intersection of Liloa Drive and Piikea Avenue are projected to operate at LOS D or better during both peak hours.

The intersection of Piilani Highway and Piikea Avenue is projected to operate at LOS C during the AM peak hour and at LOS D during the PM peak hour. The northbound Piilani left turn to Piikea is projected to operate at LOS E during the AM and PM peak hours. With the project-related improvements, the eastbound Piikea left turn to Piilani is projected to operate at LOS E during the AM peak hour and at LOS F during the PM peak hour. The Piilani southbound through movement is projected to operate at LOS D or better during both peak hours.

The intersection of South Kihei Road and Lipoa Street is projected to operate at LOS B during the AM peak hour and at LOS C during the PM peak hour. All movements are



projected to operate at LOS C or better during the AM peak hour and at LOS D or better during the PM peak hour.

The intersection of Liloa Drive and Lipoa Street is projected to operate at LOS C during the both the AM and PM peak hours. All movements are projected to operate at LOS D or better during both peak hours.

With project-related improvements, the intersection of Piilani Highway and Lipoa Street/Lipoa Parkway is projected to operate at LOS C during the AM peak hour and at LOS D during the PM peak hour. The intersection benefits from project-related traffic being diverted to the mauka collector. All Piilani through movements are projected to operate at LOS D or better and all turning movements or minor street movements are projected to operate at LOS E or better.

The intersection of South Kihei Road and East Welakahao Road is projected to operate at LOS B during the AM peak hour and at LOS C during the PM peak hour. During the AM peak hour, all movements are projected to operate at LOS B or better. All movements are projected to operate at LOS D or better during the PM peak hour.

At the intersection of Piilani Highway and East Welakahao Road, the eastbound Welakahao left turn is projected to operate at LOS E during both peak hours.

Overall LOS is a more comprehensive measurement of effectiveness at an intersection. Mitigation measures are recommended at Piilani Highway intersections that are projected to operate at worse than overall intersection LOS D.

Summary of Results of the Updated TIAR

The following issues were identified within the project study area:

- The intersection of Piilani Highway and Kaonoulu Street is projected to operate at LOS F during PM peak hour with or without MRTP. The construction of the Mauka Collector is necessary to relieve congestion on Piilani Highway. The addition of the Mauka Collector is projected to improve the overall intersection



LOS to an acceptable level on Piilani Highway except for at the intersection with Kaonoulu Street during PM peak hour.

- The addition of MRTP project-related improvements at the intersection of Piilani Highway and Old Welakahao Road results in better LOS. Specifically,
 - At the intersection of Piilani Highway and Piikea Avenue, the overall LOS is projected to improve from F to C in the AM peak hour and from F to D in the PM peak hour.
 - Mitigation measures are recommended at Piilani Highway intersections that are projected to operate at worse than overall intersection LOS D.

CONCLUSIONS & RECOMMENDATIONS

Phase 1

~~It is essential that the Liloa Drive extension be constructed as the conditions are projected to reach capacity in the north-south direction in Kihei. The background growth in traffic from planned future developments warrants adding capacity by constructing this roadway.~~

Without Project

~~Based on the assumed background growth projections and build-out of projects listed in Section III.A.2 of the TIAR (Appendix C), in 2024 without the MRTP development, study area intersections along Piilani Highway are projected to operate at or near capacity. This is caused by regional growth, including developments in the Kihei/Wailea/Makena areas. It is important that the Liloa Drive extension be constructed and operational within the Kihei area to alleviate pressure on Piilani Highway caused by further development. The intersection of Piilani Highway and Piikea Avenue is particularly affected by the through volumes on Piilani Highway, and improvements may be necessary to increase capacity for the mauka-bound approach and the northbound left turn. Based on the operational analyses of intersections, the following are recommended to be implemented by the year 2024:~~

- ~~1. Complete Liloa Drive continuously between Kaonoulu Street and Kanani Road as a two-lane roadway.~~



- ~~2. At the intersection of Piilani Highway/East Welakahao Road, observe queuing at the East Welakahao approach left turn to determine the extent to which the northbound Piilani Highway refuge lane is utilized.~~

With Project

~~Based on the assumed background growth projections and build-out of projects listed in Section III.A.2 of the TIAR (Appendix C), intersections analyzed are projected to operate near capacity along Piilani Highway in Year 2024 with Phase 1 of the MRTTP development. While the project does contribute to the impact, the majority of the volume is regional growth. With improvements at the intersection of Piilani Highway and Lipoa Parkway, the project's impact can be mitigated.~~

~~Based on the operational analyses of intersections, the following are recommended to be implemented with Phase 1 to mitigate the project's impact:~~

- ~~1. At the intersection of Piilani Highway and Lipoa Parkway:
 - ~~a. Construct an additional southbound Piilani Highway left turn lane (two total);~~
 - ~~b. Widen westbound Lipoa Parkway to provide for left, through, and right turn lanes;~~~~
- ~~2. Widen and/or restripe eastbound Lipoa Street to provide left, through, and right turn lanes;~~
- ~~3. Adjust the signal timing at the intersection of Liloa Drive and Lipoa Street to better serve the anticipated traffic pattern;~~
- ~~4. Connect Hookena Street as a two-lane roadway to Piilani Highway as a right in/right out; and~~
- ~~5. Work with Maui Bus to provide additional service within MRTTP by adding additional stops and increasing frequency of service.~~



It is recommended that future regional traffic studies confirm the need for these improvements based upon actual operating conditions closer to the time that these improvements are constructed.

Phase 2

Projections twenty years out to 2034 identify the need for the mauka collector to be constructed due to the roadway network reaching capacity in the north-south direction. While these assumptions will need to be updated closer to the horizon year, today's projections indicate that additional capacity will be needed due to planned future developments and other regional growth.

Without Project

Based on the assumed background growth projections and build-out of projects listed in Section III.A.2 of the TIAR (Appendix C), intersections analyzed without the MRTTP development are projected to operate at capacity along Piilani Highway in Year 2034 due to the continued regional growth, including developments in the Kihei/Wailea/Makena areas. The intersection of Piilani Highway and Piikea Avenue is projected to experience LOS F conditions for the mauka bound approach and the northbound left turn. The southbound through movements at the intersection of Piilani Highway and Lipoa Parkway is projected to operate at LOS E.

In addition, the intersection of Liloa Drive and Lipoa Parkway is projected to have LOS F turning movements unless the existing signal timing is altered to accommodate the increased north-south emphasis on Liloa Drive. The roundabout at Liloa Drive/Piikea Avenue is projected to operate near capacity during the PM peak hour. Finally, the mauka bound Welakahao intersection with Piilani Highway is projected to experience LOS F conditions due to increased volumes on Piilani Highway.

Based on the operational analyses of intersections, the following are recommended to be implemented by the year 2034, subject to verification that the improvements are warranted, with updated traffic engineering studies at the time of implementation:

1. Construct the mauka collector as a two-lane roadway between Mokulele Highway and a point somewhere south of MRTTP on Piilani Highway.



2. ~~Determine whether the addition of an additional left turn lane for the EB Piikea approach and/or the northbound Piilani approach is appropriate to address the capacity issues at the intersection of Piilani Highway/Piikea Avenue.~~
3. ~~Examine potential methods to increase capacity of the roundabout at the intersection of Liloa Drive/Piikea Avenue.~~

With Project

~~Based on the assumed background growth projections and build-out of projects listed in Section III.A.2 of the TIAR (Appendix G), intersections analyzed are projected to operate near capacity along Piilani Highway in Year 2034 with Phase 2 of the MRTP development. As with Phase 1, it is important that the Liloa Drive extension be constructed and operational to alleviate pressure on Piilani Highway. The mauka collector is also necessary to divert traffic away from Piilani Highway.~~

~~Intersections analyzed are projected to operate near capacity along Piilani Highway in Year 2034 with Phase 2 of the MRTP development. While the project does contribute to the impact, the majority of the volume is regional. With improvements at the intersection of Piilani Highway and Lipoa Parkway as well as the mauka collector, the project's impact can be mitigated.~~

~~The project impacts the Piilani Highway/Piikea Avenue and Liloa Drive/Piikea Avenue intersections but accounts for a relatively small percentage of the total peak hour traffic. Background traffic without the project would trigger the need for a two-lane mauka collector road. Analysis of projected 2020-2034 conditions indicates that a four-lane mauka collector road will likely be warranted sometime in the Buildout of Phase 2. Based on the operational analyses of intersections, the following are recommended to be implemented with Phase 2 to mitigate the project's impact:~~

1. ~~Construct the portion of the mauka collector within the MRTP property.~~
2. ~~Consider at least 2 and preferably 3 mauka bound access points to the mauka collector within the Maui R&T development to limit congestion at the mauka collector's intersections with internal roadways.~~

CONCLUSIONS & RECOMMENDATIONS



The development of the MRTP will occur in two phases ending in 2024 and 2034. The following mitigative transportation improvements for each phase are provided below:

Phase 1 in Year 2024

Phase 1 will be located directly off of Lipoa Parkway and will consist of residential, mixed-use commercial, civic, and employment core land uses. Phase 1 will consist of 723,200 SF of Employment, 100,000 SF of Retail, 750 Residential Dwelling Units, 150 Hotel Rooms, 102,000 SF of Elementary School. The planned MRTP Phase 1 will generate 1,285 trips during AM peak hour and 1,056 during PM peak hour.

Based on the intersection operational analyses, it is recommended that MRTP construct the following necessary transportation improvements to mitigate Phase 1 project generated impacts along Piilani Highway:

2. Piilani Highway/Hookena Street Access
 - c) Construct 2-lane Hookena Street from within MRTP to intersect Piilani Highway across from East Waipuilani Road;
 - d) Configure the westbound Hookena approach as a right-in/right-out access with stop control;
 - e) Provide acceleration and deceleration lanes to and from Piilani Highway;
 - f) Maintain existing delineators on Piilani Highway to prevent left turns from East Waipuilani Road or Hookena Street from crossing the center line of Piilani Highway.
5. Piilani Highway/Piikea Avenue
 - a) Construct an additional eastbound Piikea Avenue left turn lane (two total);
 - b) Retime the traffic signal accordingly to optimize the intersection operation.
6. Piilani Highway/Lipoa Parkway
 - a) Construct an additional southbound Piilani left turn lane (two total);



- b) Widen westbound Lipoa Parkway to provide for left, through, and right turn lanes;
 - c) Widen and/or restripe eastbound Lipoa Street to provide left, through, and right turn lanes;
 - d) Adjust signal timing and phasing to provide leading protected left turn phases for the east and westbound Lipoa left turn movements;
 - e) Add the missing crosswalk on north Piilani leg of the intersection to improve pedestrian connectivity.
7. Internal Kihei High School Access
- a) Construct an internal Kihei High School Access from within MRTP;
 - b) Provide bicycle and pedestrian connectivity between the school and MRTP

In addition, the background traffic growth from planned future developments including developments in the Kihei/Wailea/Makena areas warrants extending Liloa Drive as a two-lane facility to provide a direct connection between Kaonoulu Street and Kanani Road. It is essential that the Liloa Drive Extension be constructed as the added capacity as the area continues to grow. Without Liloa Drive extension, the traffic conditions along Piilani Highway would be adversely affected and generally deteriorate to Level of Services E or F with and without MRTP.

The County of Maui has included Liloa Drive Extension in its Fiscal Year (FY) 2013 Capital Improvement Project Proposal. \$18.2 million was budgeted for design and construction from FY 2015 to 2018. The project is not, however, included in Hawaii State DOT's current Statewide Transportation Improvement Program (STIP). Extensive consultation and discussions with the County indicated that Liloa Drive Extension project will be the County's priority and will be programmed into future STIP.

Phase 2 in Year 2034

Building upon the land uses in Phase 1, Phase 2 will consist of 1,014,800 SF of Employment and 500 Residential DU. In addition to the trips generated by Phase1, the planned



MRTTP Phase 2 will generate 835 trips during AM peak hour and 878 during PM peak hour.

Based on the intersection operational analyses, it is recommended that MRTTP construct the following necessary transportation improvements to mitigate Phase 2 project generated impacts along Piilani Highway:

1. Piilani Highway/Old Welakahao Road
 - a. Construct 2-lane Old Welakahao Road as MRTTP's direct access to Piilani Highway;
 - b. Signalize the intersection and provide a leading protected left turn phase for the southbound Piilani Highway left turn into Old Welakahao Road;
 - c. Provide southbound left turning lane from Piilani Highway to Old Welakahao Road and westbound left turning lane from Old Welakahao Road to Piilani Highway;
 - d. Provide acceleration and deceleration lanes to and from Piilani Highway.
2. Mauka collector within MRTTP property
 - a. Construct the mauka collector as a four-lane roadway within MRTTP property;
 - b. Construct three mauka-bound access points to the mauka collector with proper intersection spacing within MRTTP property;

Piilani Highway will continue to encounter conditions of congestion and excessive delays with and without MRTTP by Year 2034 due to regional growth. The construction of the Mauka collector between Mokulele Highway and a point somewhere south of MRTTP on Piilani Highway will be critical to north-south mobility in Kihei because it would provide much needed additional capacity and divert regional trips away from Piilani Highway. The issues associated with the operating condition of the intersections along Piilani Highway would become an element of the overall regional transportation planning issue associated with all the major arterials in Kihei. Because these issues are long range and of a regional nature, they must be addressed collectively by the State, the County, the land owners, and other stakeholders as part of the long-range highway planning documents.



Maui County strongly supports an interconnected Kihei Mauka transportation network as growth in the region warrants. The 1998 Kihei-Makena Community Plan also echoed the need for a North-South roadway mauka of Piilani. The Maui Island Plan contemplates a future north south roadway in several sections and depicts the preferred road alignment. Similar directions are included in the project descriptions of Kihei Mauka and the North Kihei residential planned growth areas to the north of MRTP.

MRTP has initiated discussions with other landowners about providing a continuous in-tract mauka collector roadway as directed by the County general plan. MRTP is willing to work with other land owners located mauka of Piilani Highway to coordinate on Mauka collector cost sharing and alignment.

Additionally, It is recommended that this TIAR be updated at the conclusion of construction on Phase 1 and prior to starting Phase 2 in order to update if and when the four-lane roadway will be required. The following Transportation Demand Management Measures (TDMM) are being considered:

1. *Trip reductions through the development of compact mixed use communities* - Mixed-use developments provide many benefits, including reducing reliance on automobiles (especially for external trips).
2. *Pedestrian and bicycle-friendly infrastructure* - Within the MRTP development, sidewalks and bike lanes will be provided along collector and local roadways to encourage residents and employees to use alternate forms of transportation.
3. *Provide connectivity with any future adjacent developments to the north and south* - Creating a continuous roadway network mauka of Piilani Highway will provide options for drivers mauka of Piilani Highway. This will reduce the dependence on Piilani Highway.
4. *Encourage alternate work schedules and off peak hours for employment generators* - Alternate work schedules allow employees to work with their employers to establish their own schedules. Alternate work schedules can provide the flexibility for employees to avoid the AM and PM commuter peaks, thereby reducing the development's impact on peak hour traffic. Encouraging off peak



hours for employment generators would have the same effect. MRTP should work with its employers and tenants.

5. ***Alternate Access Methods*** – Encourage and work with employers and tenants to interview employees on commuting habits. It may be feasible to run a shuttle or park and ride in areas such as Kahului/Wailuku which contain high amounts of residential land. It may also make sense for employees to carpool. The following methods of consolidating trips should be considered:
 - a. Park and Ride
 - b. Ridesharing/Carpooling/Vanpooling
 - c. Regional and sub-regional shuttles
6. Work with HDOT to provide a suitable interface with Piilani Highway for pedestrian and bicycle facilities.
7. Work with Kihei High School to provide bicycle and pedestrian connectivity between the school and MRTP.

Internal Roadway Improvements and Circulation

Lipoa Parkway serves as the primary east-west access route within the MRTP. It is currently configured as a two-lane roadway that can be improved to become divided four-lane collector roadway. North and South Holopono and North and South Ninau Streets provide north south access within the MRTP. These streets are two-lane roadways which connect to Lipoa Parkway. Portions of North and South Holopono Streets, North and South Ninau Streets, and Ho'okena Street -- another planned collector road within the existing 24-lot MRTP site -- have not yet been constructed. Construction plans to complete these roadways have been approved by the County of Maui under a bonded subdivision agreement with the landowner which ensures the completion of these roads if the adjoining lots are developed in the future.

Access and circulation within MRTP will be provided by an internal roadway network consisting of connector and local streets arranged in the modified grid pattern depicted in Figure 36, "Circulation Plan". Six basic street sections will be utilized to facilitate the



safe movement of motor vehicles, bicycles and pedestrians at compatible speeds and volumes (See: Figure 37a-d, “Typical Street Sections”). The internal roadway network and street sections are designed to distribute, rather than concentrate, motor vehicle traffic in order to provide a safe low speed street environment compatible with pedestrians and bicycles as well as vehicles. This is a significant departure from the more common practice of designing streets solely to minimize the delay to motor vehicles.

Lipoa Parkway

Lipoa Parkway will be improved from its current two-lane configuration to a four-lane road section complete with pedestrian walks and dedicated bike lanes as depicted in Figure 37a. These improvements will enable Lipoa Parkway to serve efficiently as both the primary vehicle and bicycle access route connecting an expanded MRTP to rest of Kihei. A 24-foot wide planted median island will separate travel in opposite directions, with wide landscaped shoulders providing substantial green open space.

North - South Greenway

The central 3,500 foot segment of Ninau Street will be become a 92-foot wide “North-South Greenway” which will serve as the principal north south route through the MRTP. This North-South Greenway (Figure 37b-1) will feature a divided two-lane roadway where with 6-foot bicycle lane and curbside parking is permitted and 8 7-foot wide walkways widely separated from the moving-vehicle lanes provide a safe and inviting route for bike and pedestrian travel.

South Ninau Bicycle Lane

The South Ninau Bicycle lane is intended to be a raised bicycle lane. This configuration raises the bicycle lane and adjacent parking lane above the level of the driving lane. (Figure 37b-2) will be a 72-foot-right-of-way, two lanes with a 10-foot travel lane and a 6-foot raised bicycle lane and raised 8-foot wide curbside parking. 6-foot wide concrete sidewalks will be provided on both sides of the street.

Connector Street

Connector Streets (Figure 37c) will be 60-foot right-of-way, two-lane streets with an 11-foot wide travel lane and 8-foot wide curbside parking lane in each direction. 6-foot wide concrete sidewalks will be provided on both sides of the street through both residential and commercial areas, enabling pedestrians to stroll comfortably two-abreast.

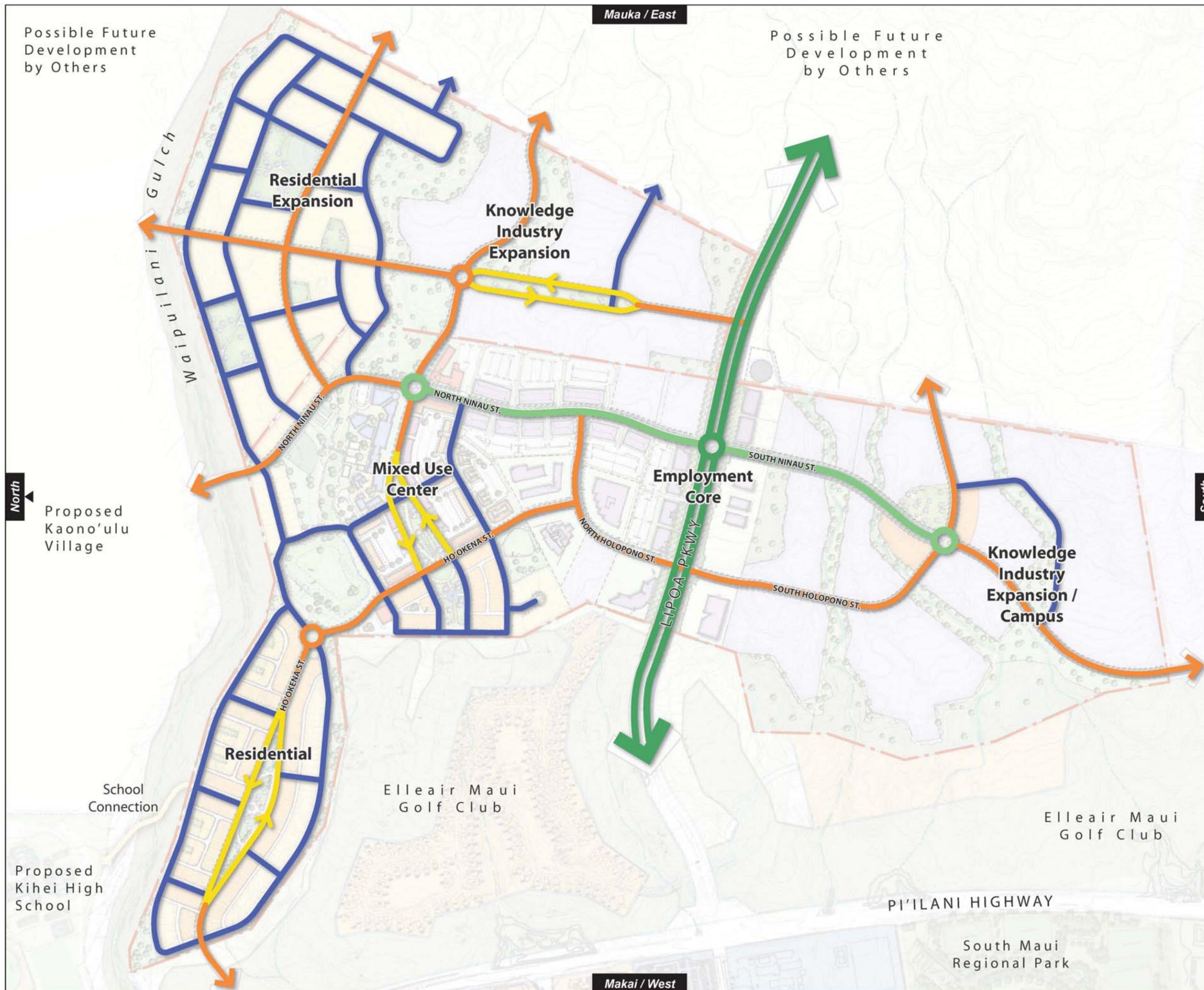


Split Connector at Open Space (One-Way Couplet)

Connector Streets will be split into one-way couplets (i.e. a pair of one-way streets) (See: Figure 37c) around planned open spaces in certain locations, but will maintain the same single travel lane with curbside parking configuration featured on the standard Connector Streets.

Maui Research & Technology Park

CIRCULATION PLAN



LEGEND

- (A3) Lipoa Parkway
- (B) North - South Greenway
- (C) Connector Street
- (D) Split Connector at Open Space
- (E) Local Street

FIGURE 36
CIRCULATION PLAN
 MAUI RESEARCH & TECHNOLOGY PARK
 Kihei, Maui, Hawaii

March 20, 2012

0' 300' 600'





Local Street

Local streets (See: Figure 37d) will have a 52-foot wide right-of-way with two 8-foot wide travel lanes and 7-foot wide curbside parking lanes on either side. 5-foot wide concrete sidewalks provided on both sides of the street will facilitate safer walking by minimizing the need for pedestrians to cross moving vehicle lanes in the street in order to reach the nearest sidewalk.

Alley

Greencourt, townhome and small-lot single-family residential developments may utilize “alleys” (shared driveways) to access garages located off of the public street (See: Figure 37d). A typical alley supporting two-way traffic will consist of a 20-foot right-of-way containing a 16-foot pavement, which is sufficiently wide to let two passenger cars traveling in opposite directions move slowly past each other. The use of alleys has considerable practical value to pedestrian-oriented communities as their use can dramatically reduce the number of driveway curbcuts, thereby minimizing the potential number of vehicle and pedestrian conflict points along residential sidewalks while significantly increasing the amount of curbside parking available.

Transit

MRTP will work with the Maui County Dept. of Transportation to expand and improve transit service as Phases 1 and 2 develop in order to make transit an attractive alternative to automobile travel for workers, residents and visitors. Transit stops that are well connected to pedestrian and bicycle routes will be planned and constructed as the project area's roadway system expands (See: Figure 38, “Transit Circulation Plan”).

Bicycle and Pedestrian Improvements

The expansion of the Maui Research and Technology Park has been envisioned with pedestrian connectivity as a first priority.¹⁴ Consequently, a substantial number of infrastructure improvements are proposed to make MRTP pedestrian and bicycle-friendly (See: Figure 39, Pedestrian and Bicycle Plan”).

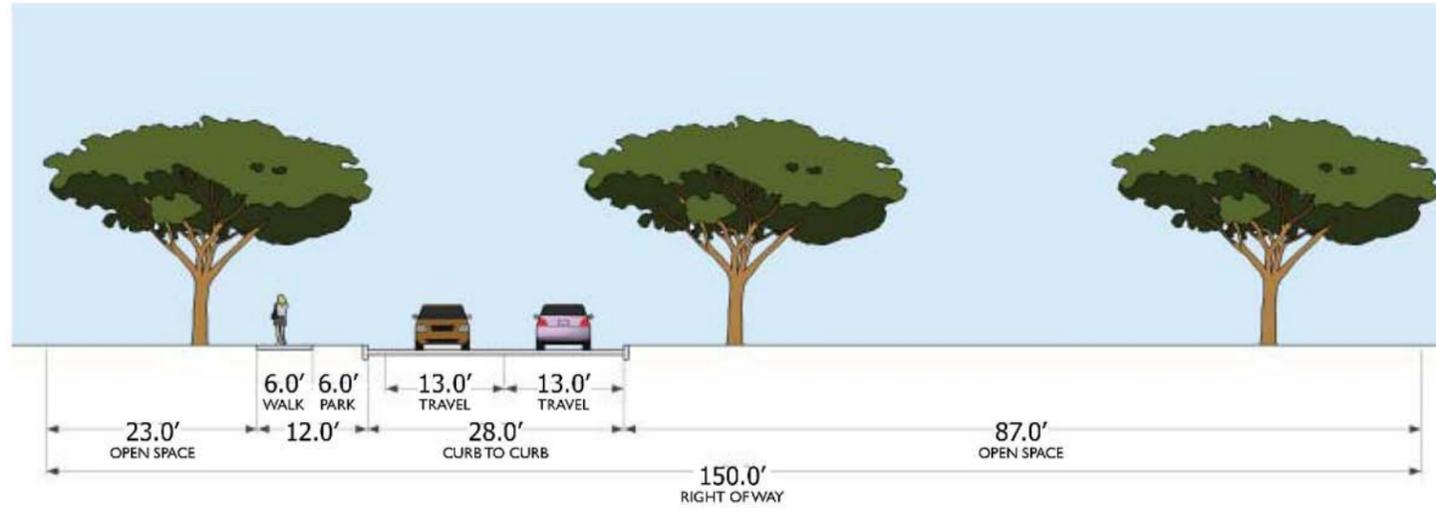
¹⁴ Calthorpe Associates and Chris Hart & Partners, “Maui Research and Technology Park Development Code,” ~~December 10, 2010. p.36.~~ November 10, 2012. p36.



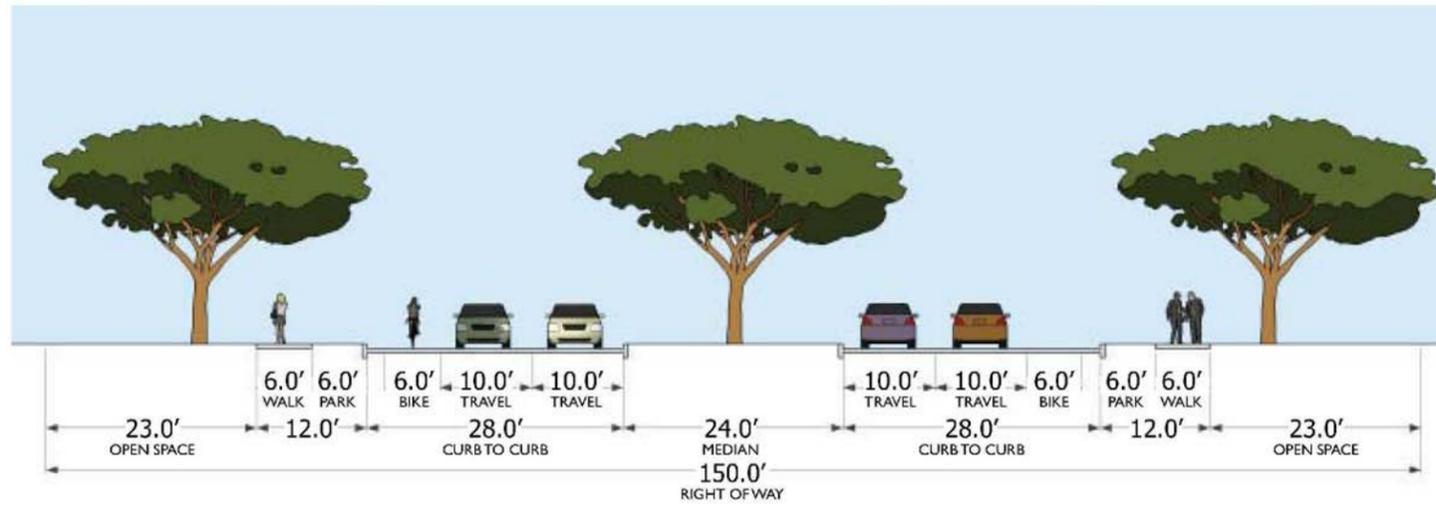
- 1) Sidewalks will be provided on both sides of all streets to establish pedestrian routes alongside vehicle routes to all locations within the MRTP;
- 2) Internal streets will be small in scale with narrow pavements to calm vehicle traffic and make it safer for bicycles to share the road with cars¹⁵ and for pedestrians to cross streets;
- 3) Upgrades to the Lipoa Parkway / Piilani Highway signalized intersection will include striping and other improvements needed to connect and create a safe transition between the bicycle lanes on Piilani Highway and the new bicycle lanes that will be constructed along Lipoa Parkway;
- 4) If feasible, In response to comments from the DOE, and Senator Rosalyn H. Baker, the Applicant is coordinating with the DOE, Kihei Community and other applicable landowners, to plan for a direct bicycle and pedestrian connection will be made between the neighboring Kihei High School and the Maui Research and Technology Park; (See: Figure 40, "Conceptual Pedestrian and Bicycle Connection to Kihei High School"). This conceptual pedestrian and bicycle path proposes to pass under Piilani highway at Waipuilani gulch to facilitate a future linkage between the north-south bike and pedestrian trail along Liloa Drive and future development to the east (mauka) of the MRTP.
- 5) ~~An east west bicycle and pedestrian trail will be established through MRTP Phases 1 and 2 along planned greenways and open spaces to facilitate a future linkage between the north-south bike and pedestrian trail along Liloa Drive and future development to the east (mauka) of MRTP as depicted in Figure 5-6 of the Preliminary Engineering and Drainage Report in Appendix F.~~

¹⁵ Calthorpe Associates and Chris Hart & Partners, "Maui Research and Technology Park Development Code," December 10, 2010. p44. November 10, 2012. p44.

V:\Projdata\08proj\08028 (Maui R&T Park - Master Plan)\dwg2008\exhibits\Prelim Engineering\Exb-street-sections.dwg



A1
LIPOA
PARKWAY
(Existing)



A3
LIPOA
PARKWAY
(Final)

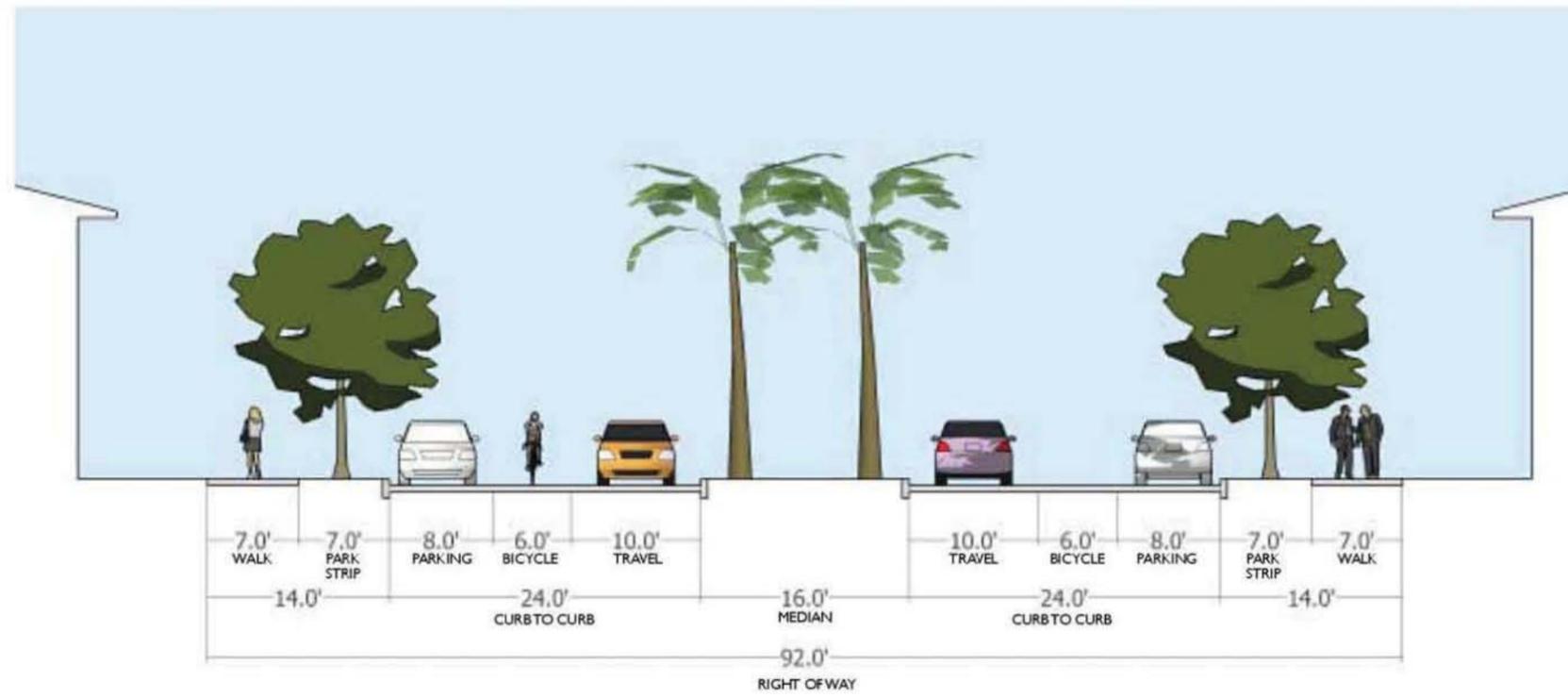
0' 15' 30'

TYPICAL SECTION - LIPOA PARKWAY

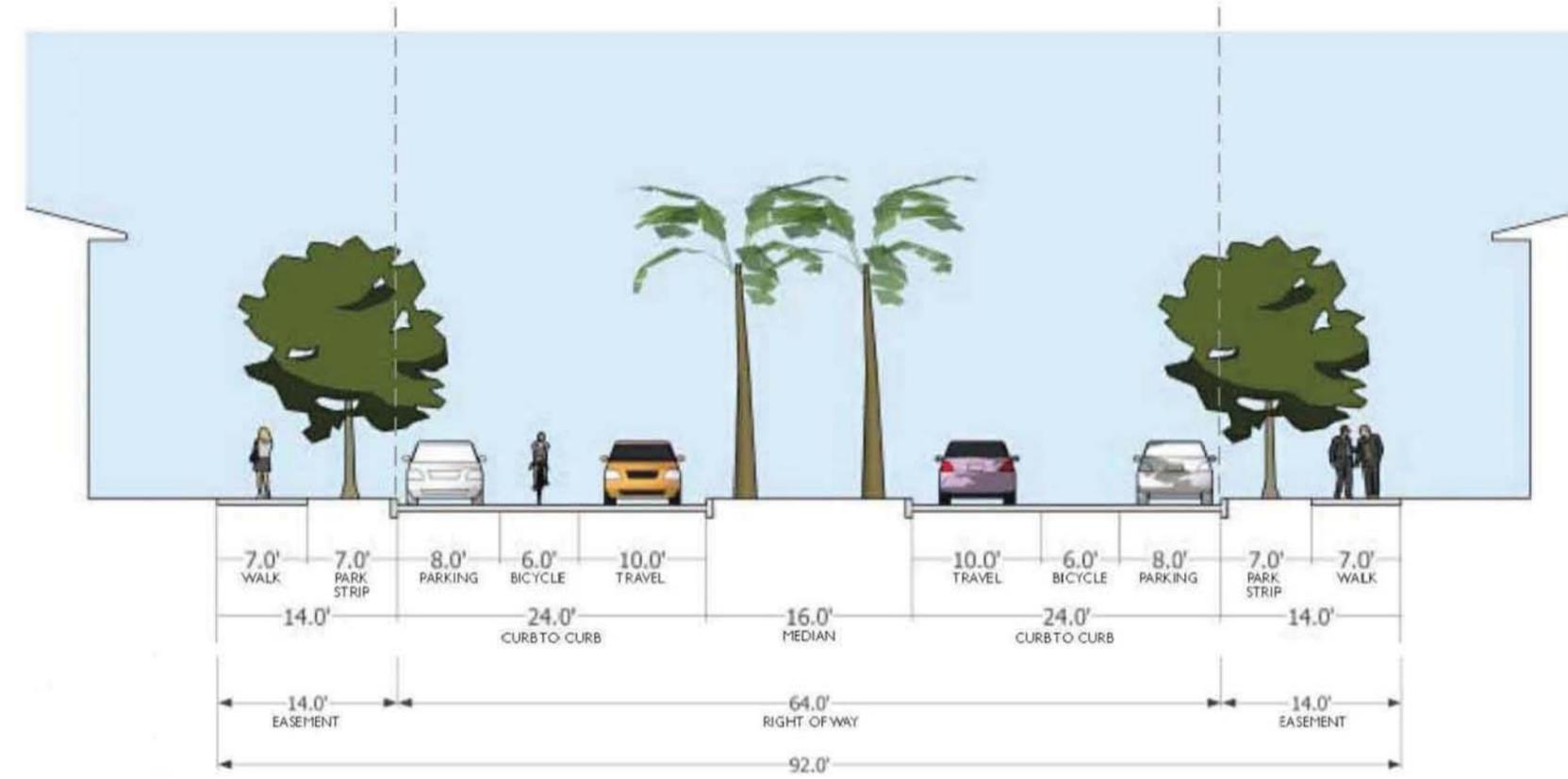
Source:
Cathorpe Associates and Chris Hart & Partners,
"Maui Research and Technology Park
Development Code", December 10, 2010.

FIGURE 37a
TYPICAL STREET SECTIONS

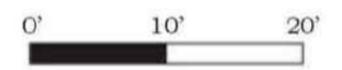
V:\Proj\data\08028 (Maui R&T Park - Master Plan)\dwg\2008\exhibits\Prelim_Engineering\Exb-street-sections.dwg



B1
 NORTH - SOUTH
 GREENWAY



NINAU STREET
 (Final,
 North - South
 Greenway Format)

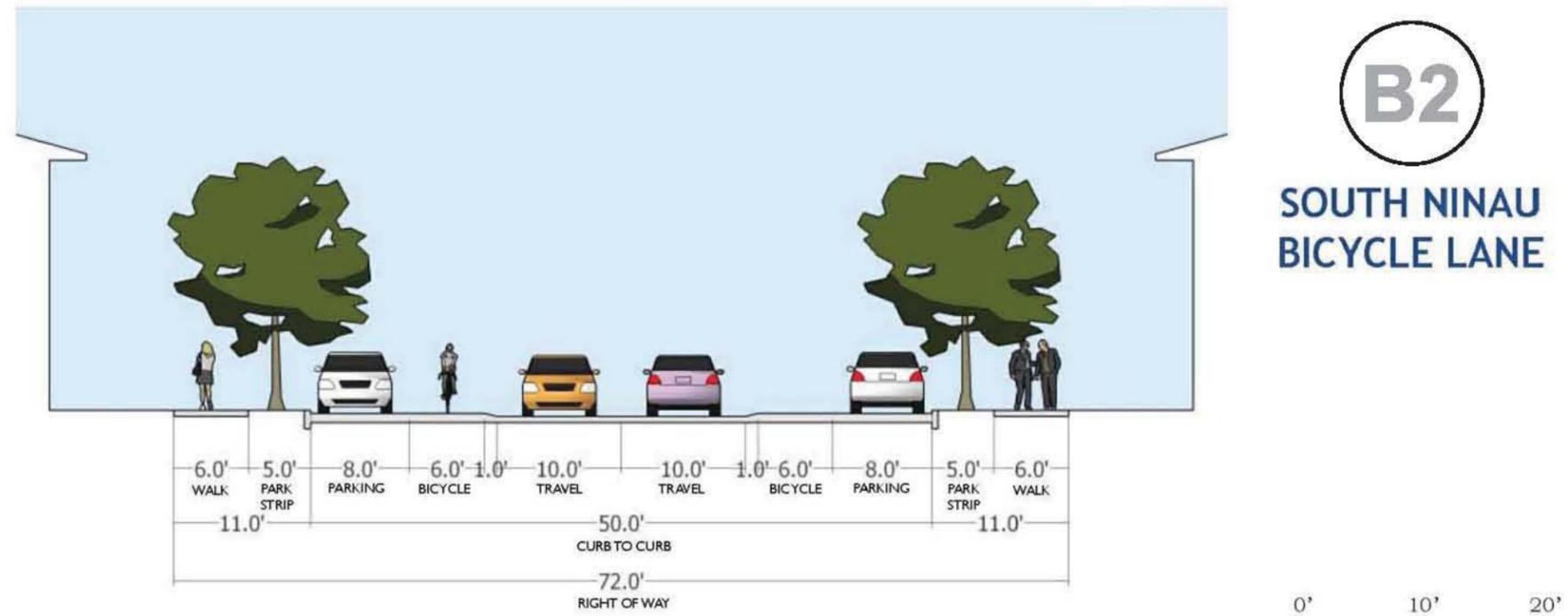


TYPICAL SECTION
NORTH-SOUTH GREENWAY

Source:
 Cathorpe Associates and Chris Hart & Partners,
 February 2013.

FIGURE NO. 37b1
 TYPICAL STREET SECTIONS

V:\Projdata\08proj\08028 (Maui R&T Park - Master Plan)\dwg2008\exhibits\Prelim_Engineering\Exb-street-sections.dwg

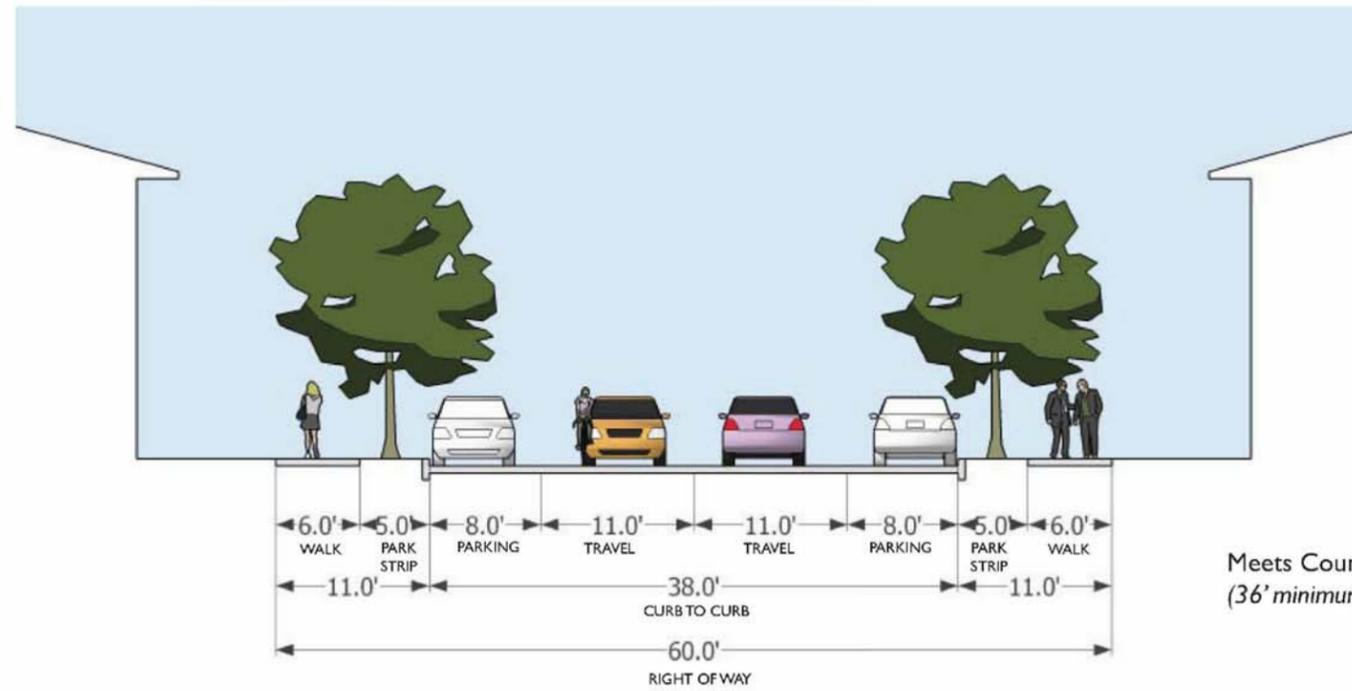


TYPICAL SECTION
NORTH-SOUTH GREENWAY

Source:
Cathorpe Associates and Chris Hart & Partners,
February 2013.

FIGURE NO. 37b2
TYPICAL STREET SECTIONS

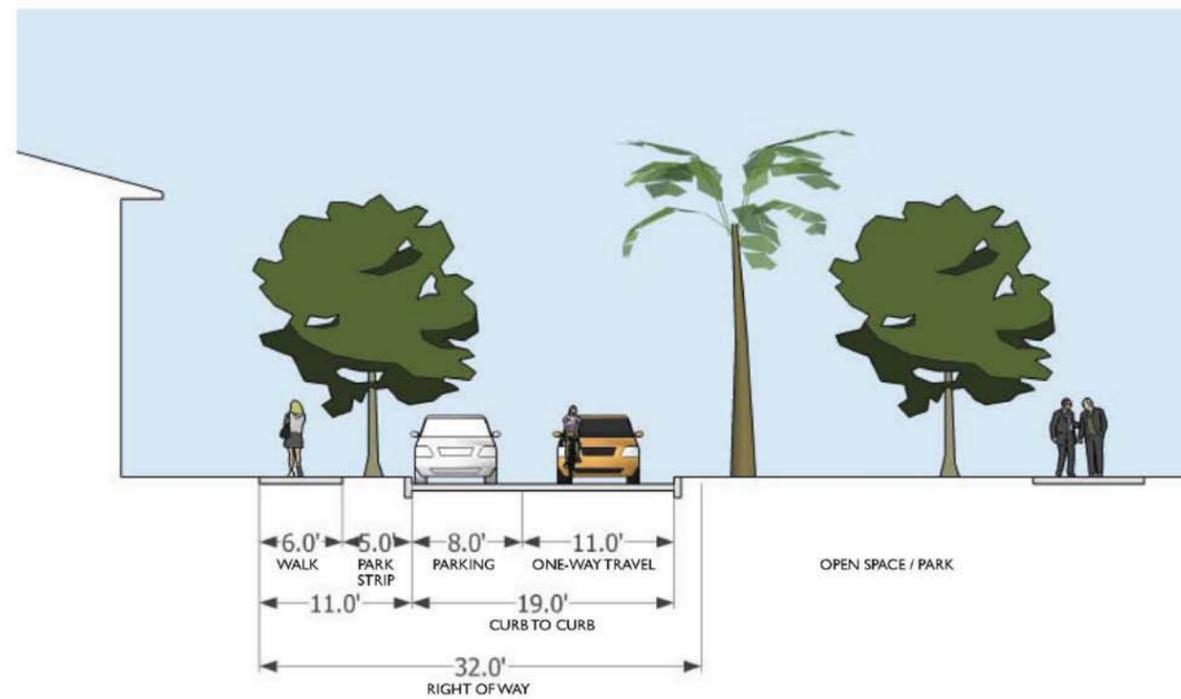
V:\Proj\data\08proj\08028 (Maui R&T Park - Master Plan)\dwg2008\exhibits\Prelim_Engineering\Exb-street-sections.dwg



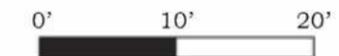
Meets County Standard
(36' minimum curb to curb)

C
CONNECTOR
STREET

TYPICAL SECTION - CONNECTOR STREET



D
SPLIT CONNECTOR
AT OPEN SPACE
(One-Way)

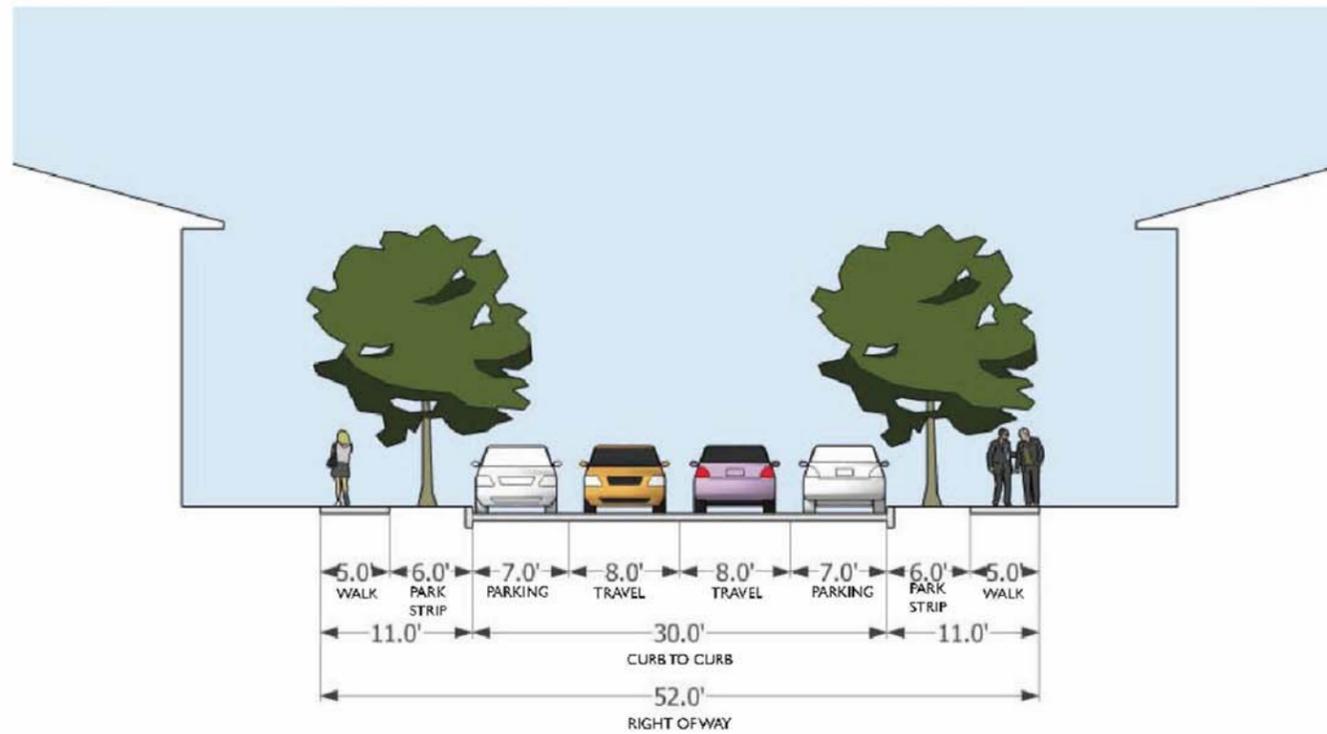


TYPICAL SECTION SPLIT CONNECTOR AT OPEN SPACE

Source:
Cathorpe Associates and Chris Hart & Partners,
"Maui Research and Technology Park
Development Code", December 10, 2010.

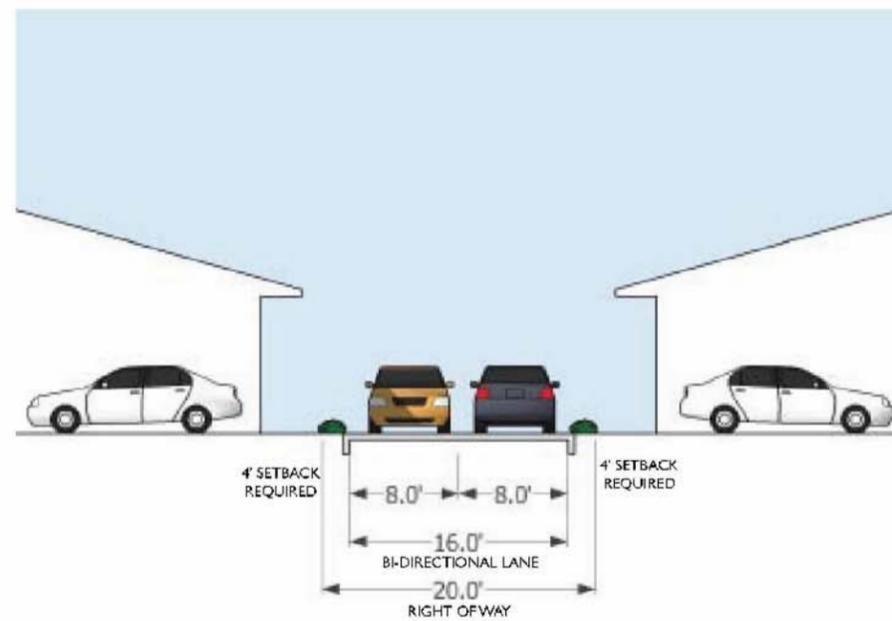
FIGURE 37c
TYPICAL STREET SECTIONS

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E
LOCAL STREET

TYPICAL SECTION - LOCAL STREET



F
ALLEY
(two-way)



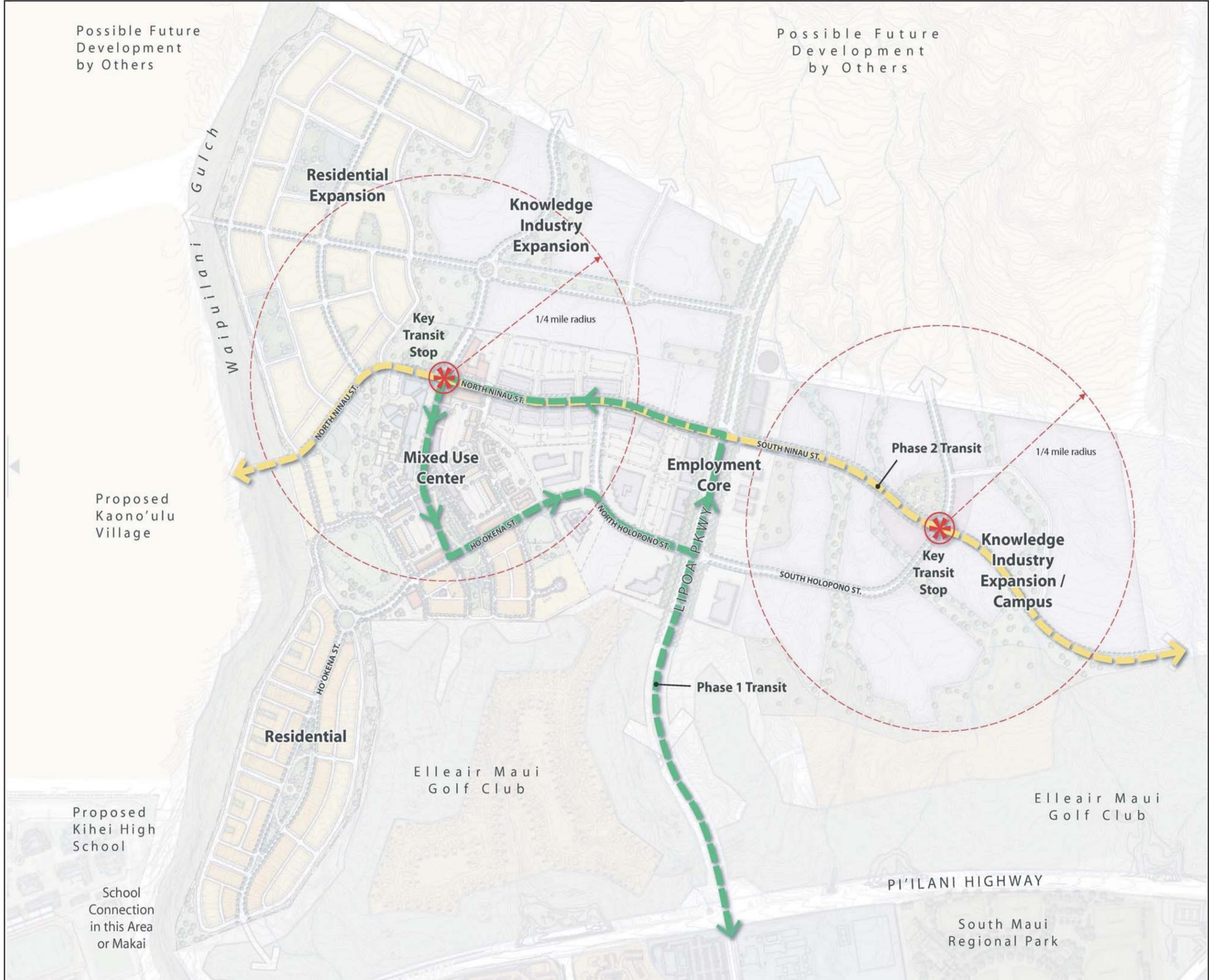
TYPICAL SECTION - ALLEY (TWO WAY)

Source:
Cathorpe Associates and Chris Hart & Partners,
"Maui Research and Technology Park
Development Code", December 10, 2010.

FIGURE 37d
TYPICAL STREET SECTIONS

Maui Research & Technology Park

TRANSIT CIRCULATION

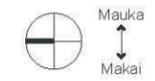


LEGEND

- Phase 1 Transit
- Phase 2 Transit

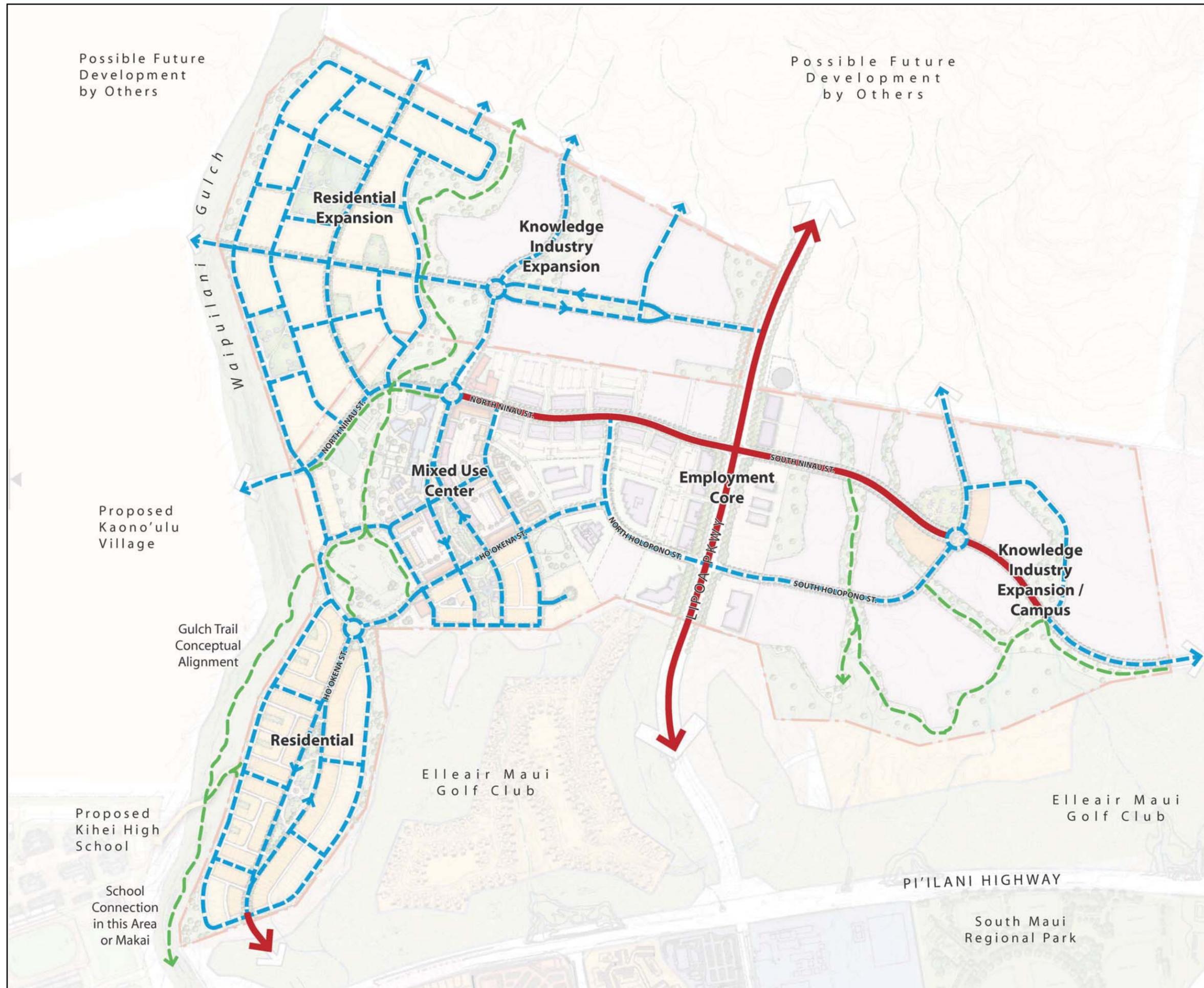
FIGURE NO. 38
TRANSIT CIRCULATION PLAN
MAUI RESEARCH & TECHNOLOGY PARK
 Kihei, Maui, Hawaii

March 20, 2012



Maui Research & Technology Park

PEDESTRIAN AND BICYCLE CIRCULATION

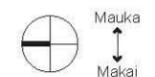


LEGEND

- Streets with Sidewalks and Dedicated Bicycle Lanes
- - - Streets with Sidewalks, In-Street Bicycles
- - - Pedestrian / Bicycle Paths in Open Space

FIGURE NO. 39
PEDESTRIAN & BICYCLE PLAN
MAUI RESEARCH & TECHNOLOGY PARK
 Kihei, Maui, Hawaii

March 20, 2012



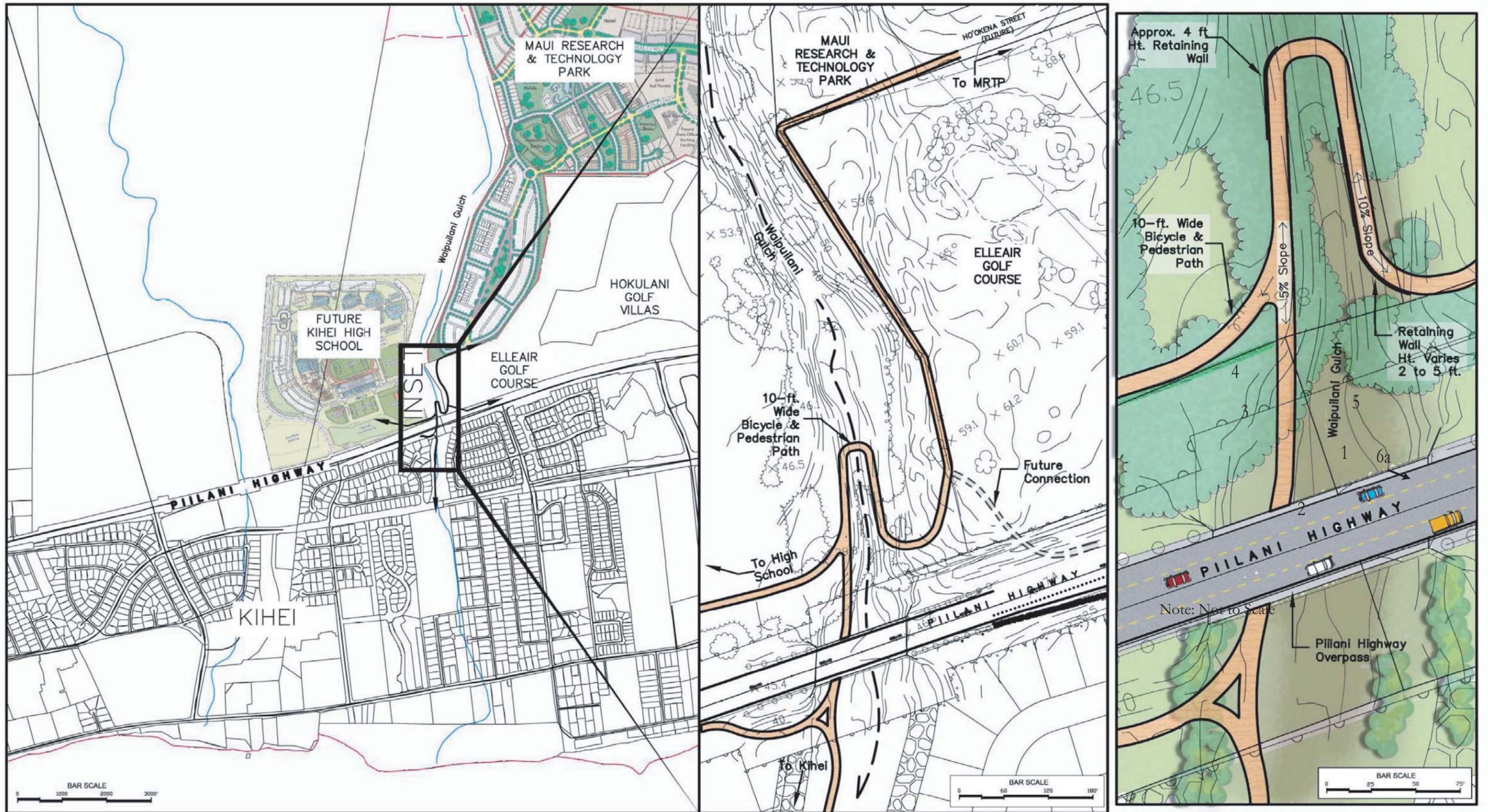


Figure 40
 Conceptual Pedestrian and Bicycle
 Connection to Kihei High School

Maui Research &
 Technology Park



2. Drainage

Existing Conditions. The 414 ~~414~~ 410.937 acre MRTP project area is flanked by two major drainageways: Waipuilani Gulch to the north, and Keokea Gulch to the south. Undeveloped pasture land owned by Haleakala Ranch Company lies to the east, immediately upstream of the MRTP; the Elleair Golf Course lies to the west, immediately downstream of the MRTP. Piilani Highway and a portion of urban Kihei lie further downstream closer to the ocean.

The undeveloped areas of the project site are currently open pasture lands with brush and scattered trees that are not being used for any particular purpose. The site slopes downward from an elevation of approximately (+) 270 feet M.S.L. on its eastern edge to approximately (+) 60 feet M.S.L. on its western edge at an average slope of roughly 3%. Six minor, natural drainageways run east-to-west across the project site.

According to the United States Department of Agriculture Soil Conservation Service's Soil Survey of Islands of Kauai, Oahu, Maui, Molokai, and Lanai, State of Hawaii, the predominant soil classification found on the project site is Waiakoa extremely stony silty clay loam (WID2) (See: Figure 29 "Soils Classification Survey Map" or Figure 4-1 of the "Preliminary Engineering & Drainage Report" in Appendix G F). Waiakoa soil is characterized as having medium runoff and posing a potentially severe erosion hazard if left exposed.

Existing Offsite Drainage Pattern

Storm runoff from the undeveloped lands mauka (east) of the project site flows across the MRTP project area in an east-to-west direction: runoff enters the MRTP project area along its eastern boundary and exits along its western boundary (See Figure 4-3 of the "Preliminary Engineering & Drainage Report" in Appendix G F). Runoff leaving the MRTP project area continues westward, flowing across the Elleair Golf Course to Piilani Highway, where existing culverts pass the runoff under the highway. Various drainage facilities then convey the runoff through urban Kihei to the Pacific Ocean. The magni-



tude of the combined offsite storm flows which pass through the MRTP is approximately 1,300 cfs.¹⁶

Existing Onsite Drainage Pattern

Surface runoff from the undeveloped project site drains in a westward direction, flowing into one of the minor drainageways crossing the MRTP and commingling with the off-site-generated storm runoff before exiting the MRTP project area toward the Elleair Golf Course, Piilani Highway and the ocean (See Figure 4-4 of the “Preliminary Engineering & Drainage Report” in Appendix G F). Peak pre-development onsite runoff estimates for each drainage area based on a 50-year recurrence interval, 1-hour duration storm are summarized in Table 16 7 below.

Table 16 17, Pre-Development Surface Runoff Rate

| Onsite Drainage Area No. | Pre-Development Quantity (cfs) |
|--------------------------|--------------------------------|
| 1 | 29 |
| 2 | 71 |
| 3 | 54 |
| 4 | 23 |
| 5 | 83 |
| 6 | 53 |
| 7 | 33 |
| 8 | 27 |
| 9 | 6 |

Note: Drainage Areas correspond to numbered Areas shown on Figure 4-4 of the “Preliminary Engineering & Drainage Report” in Appendix G F).

Located makai of the proposed Village Center, a six (6)-acre drainage detention area was designed and constructed to support the Piilani Village development located downstream of the MRTP makai of the Piilani Highway. This detention basin will not be utilized to address drainage requirements for the MRTP master plan update.

¹⁶ This 1,300 cfs flow figure represents a 100-year recurrence interval, 24-hour duration storm.



Potential Impacts and Mitigation Measures. Unemori Engineering has prepared an on-site drainage plan to mitigate surface runoff caused by seasonal storm events. Offsite runoff will be allowed to pass through the MRTP project site and continue to drain across the Elleair Golf Course and toward the existing culvert crossings at Piilani Highway without further mitigation as permitted under Maui County Drainage Rules.¹⁷

Development is expected to increase the peak flow rate of runoff generated by the MRTP project area. Peak post-development onsite runoff estimates for each drainage area based on a 50-year recurrence interval, 1-hour duration storm are summarized in Table 17.8 below.

Table 17.8, Increase in Runoff Attributable to Development of MRTP

| Project Area | | | |
|--------------------------------|------------------------------|-------------------------------|--------------------------|
| Onsite Drainage Area No. | Pre-Development Q50 (cfs) | Post-Development Q50 (cfs) | Increase in Q50 (cfs) |
| 1 | 29 | 64 79 | +50 |
| 2 | 71 | 186 | +115 |
| 3 | 54 | 140 | +86 |
| 4 | 23 | 60 | +37 |
| 5 | 83 | 167 | +84 |
| 6 | 53 | 95 | +42 |
| 7 | 33 | 86 | +53 |
| 8 | 27 | 72 | +45 |
| 9 | 6 | 19 | +13 |
| Total | 379 | 904 | +525 |

Roads and Residential Areas

The increase in runoff attributable to the construction of interior roadways and the development of single-family and multi-family residential areas is summarized in Table 18.9 below.

¹⁷ County of Maui, Department of Public Works and Waste Management, "Rules for the Design of Storm Drainage Facilities in the County of Maui," Title MC-15, Chapter 4, November 2, 1995, Section 15-04-06(14).



Table 18 19, Increase in Peak Runoff Rate Attributable to Development of Roadways and Residential Areas

| Onsite Drainage Area No. | Pre-Development Q50 (cfs) | Post-Development Q50 (cfs) | Increase in Q50 (cfs) |
|--------------------------|---------------------------|----------------------------|-----------------------|
| 1 | 29 | 79 | +50 |
| 2 | 71 | 186 | +115 |
| 3 | 54 | 90 | +36 |
| 4 | 23 | 35 | +12 |
| 5 | 83 | 88 | +5 |
| 6 | 53 | 58 | +5 |
| 7 | 33 | 49 | +16 |
| 8 | 27 | 30 | +3 |
| 9 | 6 | 7 | +1 |

This increase will be mitigated by constructing onsite drainage detention basins within each drainage area that will limit discharges to flow rates no greater than experienced under existing conditions.

Commercial and Institutional Areas

The expected increase in peak runoff attributable to the development of commercial and institutional areas is summarized in Table 19 20 below.

Table 19 20, Increase in Peak Runoff Rate Attributable to Development of Commercial Areas

| Onsite Drainage Area No. | Pre-Development Q50 (cfs) | Post-Development Q50 (cfs) | Increase in Q50 (cfs) |
|--------------------------|---------------------------|----------------------------|-----------------------|
| 1 | 29 | 29 | 0 |
| 2 | 71 | 71 | 0 |
| 3 | 54 | 104 | +50 |
| 4 | 23 | 47 | +24 |
| 5 | 83 | 162 | +79 |



| | | | |
|---|----|----|-----|
| 6 | 53 | 91 | +38 |
| 7 | 33 | 70 | +37 |
| 8 | 27 | 69 | +42 |
| 9 | 6 | 18 | +12 |

Each commercial and institutional lot will be required to mitigate its own increase in peak runoff due to development, and will be restricted to a downstream stormwater discharge at a peak rate no greater than at its pre-development level.

Overall Post-Development Condition

The collective result of all land uses employing peak runoff mitigation will be no increase in peak runoff downstream of the MRTP, as illustrated by Table 20 21.

Table 20 21, Result of Peak Runoff Mitigation by MRTP Project Area

| Onsite Drainage Area No. | Pre-Development Q50 (cfs) | Post-Development Q50 (cfs) | Increase in Q50 (cfs) |
|--------------------------------|------------------------------|-------------------------------|--------------------------|
| 1 | 29 | 29 | 0 |
| 2 | 71 | 71 | 0 |
| 3 | 54 | 54 | 0 |
| 4 | 23 | 23 | 0 |
| 5 | 83 | 83 | 0 |
| 6 | 53 | 53 | 0 |
| 7 | 33 | 33 | 0 |
| 8 | 27 | 27 | 0 |
| 9 | 6 | 6 | 0 |
| <u>Total</u> | <u>379</u> | <u>379</u> | <u>0</u> |

Proposed Improvements

Figure 4-5 of the “Preliminary Engineering & Drainage Report” in Appendix G F is a Conceptual Drainage Plan illustrating a number of proposed drainage features which have been integrated into the updated MRTP Master Plan.



Stormwater Detention

Storm runoff generated within the MRTP will typically be intercepted by drain inlets located along roadways and in building site parking lots, then conveyed by underground drainline to a stormwater detention facility which will reduce the peak discharge rate to pre-development levels before the runoff is allowed to continue downstream.

Roads and Residential Areas

Drainage detention basins designed to mitigate the peak runoff from roadways and residential areas will be distributed among the internal drainage areas within the MRTP; these basins will be sized to a 50-year recurrence interval, 1-hour duration storm in conformance with Maui County Drainage Rules.¹⁸ The planned location of these detention basins locations is depicted in Figure 4-6 of the “Preliminary Engineering & Drainage Report” in Appendix G E; their approximate capacity and required performance is summarized in Table 21 22 below.

| Table 21 22, Result of Peak Runoff Mitigation by MRTP Project Area | | | | | |
|---|------------------------|----------------------------------|--------------------------|---------------------------|------------------------------------|
| Onsite Drainage Area No. | Corresponding Basin(s) | Basin Storage Capacity (ac.-ft.) | Increase in Runoff (cfs) | Reduction in Runoff (cfs) | Net Change in Surface Runoff (cfs) |
| 1 | A, B | 4 | +50 | -50 | 0 |
| 2 | C, D, F | 11 | +115 | -115 | 0 |
| 3 | G | 3 | +36 | -36 | 0 |
| 4 | I | 1 | +12 | -12 | 0 |
| 5 | H | 1 | +5 | -5 | 0 |
| 6 | K | 1 | +5 | -5 | 0 |
| 7 | M | 1 | +16 | -16 | 0 |
| 8 | N | 1 | +3 | -3 | 0 |
| 9 | Subsurface Drain | 1 | +1 | -1 | 0 |

Commercial and Institutional Areas

Each commercial and institutional lot will be required to mitigate its own increase in peak runoff due to development and limited to a downstream stormwater discharge

¹⁸ County of Maui, Department of Public Works and Waste Management, “Rules for the Design of Storm Drainage Facilities in the County of Maui,” Title MC-15, Chapter 4, November 2, 1995, Section 15-04 05(e).



whose peak rate is no greater than its pre-development level. Peak flow mitigation of this type can be achieved by constructing subsurface storage chambers or above-ground drainage ponds within each lot. Individual drainage detention systems such as these ~~will be~~ will be sized to a 50-year recurrence interval, 1-hour duration storm in conformance with Maui County Drainage Rules.¹⁹ Table 22 23 illustrates the collective performance of the individual drainage detention systems installed by the commercial and institutional lots within each drainage area.

| Table 22 23, Collective Performance of Drainage Detention Systems Serving Commercial Areas | | | |
|---|--------------------------|---------------------------|------------------------------------|
| Onsite Drainage Area No. | Increase in Runoff (cfs) | Reduction in Runoff (cfs) | Net Change in Surface Runoff (cfs) |
| 1 | 0 | 0 | 0 |
| 2 | 0 | 0 | 0 |
| 3 | +50 | -50 | 0 |
| 4 | +24 | -24 | 0 |
| 5 | +79 | -79 | 0 |
| 6 | +38 | -38 | 0 |
| 7 | +37 | -37 | 0 |
| 8 | +42 | -42 | 0 |
| 9 | +12 | -12 | 0 |

Drainage Channels

Drainage Reserve Areas have been incorporated into the MRTP Master Plan to accommodate the safe passage of offsite storm runoff through the MRTP project area. The alignment of drainage channels which convey storm runoff through these Reserve Areas will generally follow the natural flow path of the existing drainageways as they cross the project site. Modification to the sides of these natural drainageways may be necessary in order to stabilize their banks against erosion, confine them to prevent their overflowing during very large storms, and facilitate roadway culvert crossings. Figure 4-7 of the Pre-

¹⁹ County of Maui, Department of Public Works and Waste Management, "Rules for the Design of Storm Drainage Facilities in the County of Maui," Title MC-15, Chapter 4, November 2, 1995, Section 15-04-05(e).



liminary Engineering & Drainage Report in Appendix G F illustrates the location and proposed treatment of the drainageways crossing the MRTP. When channel linings are required, materials with a natural appearance such as grass, boulders, or a rustic stone masonry finish will be used wherever possible. Figure 4-8 of the Preliminary Engineering & Drainage Report in Appendix G F is a conceptual depiction of such an application.

Stormwater Management and Water Quality

The MRTP stormwater management plan emphasizes the use of vegetated surface drainage facilities to treat and infiltrate stormwater in order to control water pollution, reduce peak flows and runoff volumes, and promote groundwater recharge.²⁰

1. Vegetated drainage facilities such as swales²¹, detention ponds, infiltration basins²² and filter strips²³ utilize infiltration of stormwater into the soil and absorption by vegetation to remove trash and floating debris, suspended solids, and organic nutrients from stormwater. Reducing the urban pollutants which reach drainageways and coastal waters, in turn, improves the general health of the watershed.
2. Vegetated swales, detention ponds and filter strips slow the movement of stormwater as it passes through them, effectively detaining the runoff and

²⁰ Calthorpe Associates and Chris Hart & Partners, "Maui Research and Technology Park Development Code," ~~December 10, 2010~~. November 20, 2012 p.70.

²¹ Vegetated swales (also called grassy swales) are typically long, narrow, gently sloping landscaped depressions planted with dense vegetation that collect and convey stormwater runoff, allowing pollutants to settle and filter out as the water infiltrates into the ground or flows through the facility. (Source: City of Portland, Oregon, "Stormwater Management Manual," Revision 4, August 1, 2008, Chapter 2: Facility Design, pp.2-48 to 2-52, 2-63 to 2-67.)

²² Vegetated infiltration basins are flat-bottomed, shallow landscaped depressions used to collect and hold stormwater runoff, allowing pollutants to settle and filter out as the water infiltrates into the ground. An inlet pipe or sheet flow over impervious area conveys the stormwater into the basin, where it is temporarily stored until it infiltrates into the ground. Infiltration basins can be sized to infiltrate large storms where soils drain well, or overflow to an approved discharge point. (Source: City of Portland, Oregon, "Stormwater Management Manual," Revision 4, August 1, 2008, Chapter 2: Facility Design, pp.2-57 to 2-60.)

²³ Vegetated filter strips (or infiltration strips) are gently sloped areas that are designed to receive sheet flows. They are typically linear facilities that run parallel to the impervious surface and are commonly used to receive the runoff from walkways and driveways. Filter strips are covered with vegetation -- typically grasses and groundcovers -- which filter and reduce the velocity of stormwater. Runoff infiltrates into the soil below as it travels downhill through the vegetated filter. (Source: City of Portland, Oregon, "Stormwater Management Manual," Revision 4, August 1, 2008, Chapter 2: Facility Design, pp.2-61 to 2-62.)



reducing its peak flow rate as it moves downstream. This peak flow reduction, in turn, reduces the capacity demanded of both new and existing drainage infrastructure -- enabling the use of smaller diameter underground drain pipes and detention basins, for instance, and preserving the capacity of existing culverts and drainage channels located further downstream.

3. Aggressive use of infiltration close to the source where runoff is generated will reduce the volume of stormwater which drains to the ocean and allow it to replenish the groundwater aquifer, instead. Reducing the volume of stormwater sent downstream as runoff will also reduce erosion of drainage channels and exposed soils; this, in turn, will reduce the amount of sediment entering coastal waters.

Streets and Parking Lots

Roadway and parking lot drainage systems will be designed to infiltrate pavement-generated stormwater onsite to the maximum extent feasible²⁴ before discharging flows into the underground storm drain system. Pavement runoff will be passed through vegetated drainage facilities located in medians, bulb-outs, curb extensions, tree planters, and landscape strips to the greatest practical extent before entering the underground storm drain system. Where foundation soils are stable and well drained, and highly compacted subgrades are not required to support heavy wheel loads -- under pedestrian walkways or bicycle paths, for example -- porous pavements constructed from pavers or permeable concrete may be used to promote infiltration and reduce the amount of impermeable surface area created.

Building Sites

Residential, commercial, and institutional occupants of the MRTP will be encouraged to utilize vegetated drainage facilities in their building site planning to the greatest practical extent. For example:

1. Incorporating vegetated swales in landscaped areas to capture, convey and filter surface runoff from buildings, driveways and parking lots in lieu of direct interception by underground drainage piping;

²⁴ Infiltration will be most effective in areas where well drained soils are present.



2. Directing roof and parking lot drainage into vegetated infiltration basins located in landscaped areas instead of piping such runoff directly into the underground storm drainage system;
3. Locating vegetated filter strips between storm drain inlets and public gathering areas or pedestrian walkways to filter out trash and debris before it enters the underground storm drain system.

Site Management Practices

Residential, commercial and institutional developments within the MRTP will be encouraged to adopt operational policies aimed at reducing urban pollutants in storm runoff by actively controlling what enters the storm drain system. The following are examples of site management practices which can reduce water pollution.

1. Routinely inspect subsurface drain sumps, basin floors, drain inlets and drain pipes and remove all accumulated sediment, trash and debris to minimize the volume of pollutants washed through the storm drainage system to the ocean.
2. Limit irrigation-induced runoff to minimize the amount of fertilizer, pesticides and herbicides washed into the storm drainage system during the drier months of the year. Monitor and adjust irrigation sprinkler watering times to minimize irrigation runoff; monitor and adjust sprinkler coverage to minimize overspray onto driveways, walkways and other paved surfaces.
3. Encourage residents and require landscape maintenance personnel to gather lawn clippings, leaves, and cuttings and haul them to a composting facility to minimize the amount of green waste left behind and washed into the storm drain system.
4. Encourage residents and require landscape maintenance personnel to use nonpolluting (“environmentally friendly”) fertilizers, herbicides and pesticides when maintaining lawns and landscaping and/or adopt maintenance techniques which do not introduce chemical pollutants into the open environment.



5. Install sediment / pollution filters on storm drain inlets draining the designated car wash areas used by apartment and condominium residents and maintain these filters regularly.
6. Prohibit non-emergency fueling or vehicle repair and maintenance work by residents or service personnel in uncovered areas exposed to weather.

3. Water

Existing Conditions. The Maui Research and Technology Park (MRTP) is located within Maui County Department of Water Supply's Central Maui Water System service area. Potable Drinking water for the 18 existing lots within the MRTP currently comes from existing wells located in upper Waiehu and North Waihee which draw groundwater from the Iao and Waihee Aquifers. Potable Drinking water from these wells is pumped into to an existing 1.0 million gallon (MG) capacity concrete water storage tank located in upper Waiehu²⁵, then conveyed across the isthmus by the Central Maui Water System's 36-inch diameter transmission main to consumers in South Maui. Water for the existing lots in MRTP is then taken from the 36-inch Central Maui transmission line into a 16-inch diameter waterline which runs from Liloa Drive near the Lipoa Street intersection, along Lipoa Street and Lipoa Parkway to the project site to supply the existing MRTP potable drinking water distribution system.

MRTP has an agreement with the County of Maui, Department of Water Supply (DWS) to construct a 0.5 MG water storage tank at an approximate elevation of 330 feet by the year 2014 to serve the future needs of the MRTP. Under the terms of this agreement, the existing 18 lots in the MRTP may rely on a connection to the County water system for their potable drinking water and fire protection water needs without having to construct a 0.5 MG water storage tank. Development beyond the first 18 lots before the year 2014 would require the completion of the 0.5 MG water storage tank.

The existing MRTP distribution system consists of 12-inch waterlines located within the existing roadways fed from the 16-inch transmission line on Lipoa Parkway through a pressure reducing valve. Due to the high water pressure in the 16-inch transmission line, a pressure reducing valve was installed at the MRTP water distribution system connec-

²⁵ The floor elevation of the 1.0 MG Waiehu Storage Tank is approximately 490 feet MSL.



tion to reduce the water pressure to approximately the same pressure that would be obtained after the 0.5 MG water storage tank is constructed in the future.

Non-Potable Drinking Water System

The Kihei Wastewater Reclamation Facility (KWWRF) produces R-1 quality effluent which is the highest quality reclaimed non-drinking water under the State of Hawaii, Department of Health Standards.

The County of Maui has established a limited reclaimed water distribution infrastructure to facilitate public reuse of the R-1 quality effluent generated by the KWWRF. This system consists of an existing 1.0 million gallon (MG) concrete tank located east of the KWWRF at elevation 300 feet above mean sea level. A distribution system consisting of 16-inch and smaller reclaimed water distribution lines deliver R-1 quality effluent from the 1.0 MG concrete water storage tank to users located primarily north of the KWWRF. The R-1 quality effluent is primarily used for irrigation purposes.

The existing irrigation systems for the landscaped common areas and developed parcels in the MRTP now utilize R-1 quality effluent from the KWWRF by drawing it from the existing County 10-inch R-1 waterline which runs along the easterly (mauka) boundary of the MRTP.

Potential Impacts and Mitigation Measures. ~~Potable~~-Drinking and non-~~potable~~ drinking water demand projections were based on land area and unit estimates using consumption rates adopted from the Maui County Department of Water Supply's *Water System Standards*.²⁶ A 60% potable/40% non-potable demand ratio -- the ratio recommended by the Honolulu Board of Water Supply for dual systems²⁷ -- was also selectively applied in certain instances to break total demand down into ~~potable~~ drinking and non-~~potable~~ drinking water demand components.²⁸ The projected water demand for MRTP is summarized as follows:

²⁶ County of Maui, Department of Water Supply, *Water System Standards*, 2002, Table 100-18: "Domestic Consumption Guidelines," p.111-3.

²⁷ See Appendix B-1 of the Preliminary Engineering and Drainage Report in Appendix F.

²⁸ See Appendix B-2 of the Preliminary Engineering and Drainage Report in Appendix F.



| Table 23 24, Summary of the Average Potable Drinking water and Irrigation Requirements for the Portion of the MRTTP Expansion Not Supplied by DWS | | | |
|--|---|----------------------------|---------------------------------|
| Phase | Developed Area | Average Daily Demand (GPD) | |
| | | Potable Drinking Water | Non-Potable drinking Irrigation |
| 1 | Employment Core | 18,877 | 19,609 |
| | Village Center | 225,743 | 114,854 |
| | Makai Residential | 211,260 | 25,660 |
| | Drainage Basins | -- | 9,632 |
| | Total for Phase 1 | 455,880 | 169,755 |
| 2 | Knowledge Exp / Campus | 40,084 | 59,460 |
| | Residential and Knowledge Industry Exp. | 302,101 | 144,114 |
| | Total for Phase 2 | 342,185 | 203,574 |
| Total for Both Phases | | 798,065 | 373,329 |

Source: Tom Nance Water Resource Engineering, "Evaluation of Source Supply Alternatives for the Planned Expansion of the Maui Research and Technology Park", March 1, 2012. See: Appendix J I, "Evaluation of Source Supply Alternatives for the Planned Expansion of the Maui Research and Technology Park" "Water Source Development Assessment".

| Table 24 25, Required Potable Drinking Water Supply Capacities | | | |
|---|----------------------------|----------------------|-------|
| Stage of | Average Daily Demand (MGD) | Maximum Daily Demand | |
| | | (MGD) | (GPM) |
| End of Phase 1 | 0.46 | 0.69 | 475 |
| End of Phase 2 | 0.80 | 1.20 | 830 |



Proposed Infrastructure

Potable Drinking Water Supply, Source Alternatives

The County of Maui Dept. of Water Supply-operated public water system remains the preferred source of water for expansion of the Maui Research and Technology Park. Unfortunately, because the Maui County Dept. of Water Supply has indicated that they cannot commit to providing ~~potable~~ drinking water beyond the existing 18 lots within the MRTP, MRTP has proposed an alternate, privately owned and maintained ~~potable~~ drinking water source and distribution system to support further expansion (See: Figure 3-1 of the Preliminary Engineering and Drainage Report in Appendix F). In response to comments from the County of Maui Department of Water Supply (DWS) the Applicant will cooperate with the Commission on Water Resource Management (CWRM) to determine available water use in the underlying Kamaole Aquifer. It is our project team's understanding that the CWRM judges use of the aquifer relative to its sustainable yield by the 12-month moving average of pumpage, not by the cumulative capacity of pump installations permits; therefore the proposed use, together with ongoing and other foreseeable use of the aquifer, will not exceed its sustainable yield.

It is our project team's understanding that DWS has not previously offered participation in well development in the North Waihee Aquifer. The Applicant will continue to coordinate with the Department of Water Supply and is willing to discuss alternatives to private water system development using the Kamaole Aquifer.

The ~~Maui Upcountry~~ Makawao-Pukalani-Kula (MPK) Community Plan prohibits the use of wells developed in the ~~Upcountry~~ MPK Community plan area from being used as a water source for another plan area and thereby constrains the location of a new well source. The ~~Upcountry~~ MPK Community Plan boundary in the vicinity of the MRTP is the 600-foot elevation contour, which means that wells developed to serve the MRTP must be located below this elevation contour.

The ~~"Evaluation of Source of Supply Alternatives for the Planned Expansion of the Maui Research and Technology Park"~~ "Assessment of the Impacts on Groundwater Re-



sources”²⁹ identifies two (2) alternate sources of water for the project and outlines the improvements required to provide the privately owned and maintained potable drinking water system for the MRTP. These alternate systems would all be privately operated and separate from the existing DWS water system currently serving the 18 existing parcels in the MRTP. The two source alternatives are summarized as follows:

1. Source Alternative 1 - Offsite Brackish Wells at 580-foot Elevation

This alternative consists of five (5) offsite brackish wells spaced 1250 feet apart with a capacity of 360 gallons per minute (GPM) per well located at the 580-foot elevation on land currently owned by Haleakala Ranch Company.³⁰ Three wells would be developed to accommodate the needs of the MRTP Phase 1, and the remaining two wells would be required for Phase 2. Offsite improvements associated with this alternative will include a 0.25 million gallon (MG) brackish water head tank located at the 590-foot elevation, a 12-inch transmission waterline to a Reverse Osmosis (RO) treatment plant using a high pressure filtration process to produce potable drinking water, two disposal wells to discharge the concentrate (wastewater) generated by the RO process, potable water storage tanks at the 375 foot elevation, and a 16-inch distribution waterline connecting the storage tanks to the MRTP's potable water distribution system. The RO treatment plant will consist of three 250 GPM treatment trains for Phase 1 and two additional 250 GPM treatment trains to accommodate Phase 2 (See: Figure 3.2a of the Preliminary Engineering and Drainage Report in Appendix F).

Brackish water desalinization was the least desirable alternative considered by the project team. In the desalinization scenario, the proposed spacing between wells and pump capacities for these wells have been selected so as not to create a local overdraft or adversely impact existing wells and or future uses of groundwater from wells to the north or south. Therefore, in this scenario, present and future public and private users will not be adversely impacted.

²⁹ Tom Nance Water Resources Engineering, “Evaluation of Source of Supply Alternatives For the Planned Expansion of the Maui Research and Technology Park,” February 7, 2012. See: Appendix I “Assessment of the Impacts on Groundwater Resources” March 2012.

³⁰ Implementation of this alternative will require an agreement with Haleakala Ranch to allow for the water source development and transmission infrastructure on Haleakala Ranch lands. At present no such agreement has been reached.



However, in the mauka-to-makai corridor of groundwater flow from which the MRTP wells will draw, other future uses of this portion of the aquifer's sustainable supply would adversely impact the MRTP wells. It is anticipated that lands mauka of the MRTP may not be able to use the groundwater, and alternate sources may be necessary. It is an unavoidable impact of the desalinization alternative. The makai users in the residential areas below Piilani Highway will continue to use Maui County drinking water and will not be impacted. In response to comments from the Maui County Department of Water Supply the proposed *Alternative 1 Offsite Brackish Wells* will not affect the water quality of the existing Maui Highlands wells. The proposed MRTP well locations have been specifically selected as not to create a local overdraft or adversely impact existing wells or future uses of groundwater from wells to the north or south.

In response to comments from the Maui County Department of Water Supply the proposed *Alternative 1 Offsite Brackish Wells* will not affect the water quality of the existing Maui Highlands wells. The proposed MRTP well locations have been specifically selected as not to create a local overdraft or adversely impact existing wells or future uses of groundwater from wells to the north or south.

The disposal wells for all of the desalting alternatives would be designed to deliver the RO concentrate into the depth at which the density of the receiving groundwater is similar to that of the RO concentrate (a function of temperature and salinity). This will be done so that there will be no tendency for the injected concentrate to rise into the basal lens and adversely impact its water quality, therefore there is no anticipated impact to the seed corn growing field located to the southeast of the MRTP. For the brackish desalting alternatives, the disposal depths would be somewhere in the basal lens' transition zone. For the saline groundwater desalting alternative, disposal will be at greater depth in the saltwater zone. The concentrate will be hypersaline, meaning that it will be of greater density than the receiving groundwater with no tendency to rise up into the basal lens.

2. Source Alternative 2 - Brackish Wells Within the MRTP

This alternative consists of five (5) onsite brackish wells located along the easterly portion of the MRTP, spaced 1,500 feet apart with a capacity of 400 GPM per well. Three wells would be developed to accommodate the needs of the MRTP Phase 1, and the remaining two wells would be required for Phase 2. A 0.25 MG brackish water head tank and RO treatment plant with two disposal wells to discharge the concentrate from the



RO treatment plant would be located within the MRTP. The RO product water would be pumped from the RO treatment facility into potable drinking water storage tanks also located within the MRTP at the 212-foot elevation. Three wells would initially be developed to accommodate Phase 1 of the MRTP and two more wells developed later with Phase 2. The RO treatment plant would consist of three treatment trains for Phase 1 and two additional treatment trains for Phase 2 (See: Figure 3.2b of the Preliminary Engineering and Drainage Report in Appendix F). The Applicant will continue to coordinate with the Department of Water Supply and is willing to discuss alternatives to private water system development using the Kamaole Aquifer.

Storage and Distribution

A total potable drinking water storage capacity of 1.5 MG of will ultimately be needed to supply the combined fire protection and domestic use needs of Phases 1 and 2. This will be provided incrementally by constructing a 1.0 MG tank with Phase 1, followed by a 0.5 MG tank with Phase 2.

Source Alternative 1 will utilize concrete tanks constructed above the MRTP at the 375-foot elevation on land currently owned by Haleakala Ranch Company. Source Alternative 2 will utilize concrete storage tanks constructed within MRTP at the 212-foot elevation and employ pumps to provide water pressure comparable to having storage tanks at the 375-foot elevation. A 16-inch distribution main will connect the potable storage tanks to the MRTP, where a new network of 8- and 12-inch distribution mains will be deployed to supply the individual lots within the development. Figure 3-3 in the Preliminary Engineering and Drainage Report (Appendix F) depicts the potable drinking water storage and distribution system described.

Water Service Agreement with County of Maui

The MRTP currently has an obligation with DWS to construct a 0.5 MG water storage tank at the 330-foot elevation by the year 2014 to service the existing 18 parcels in the project. However, since alternative sources of water will be utilized for the project, the Owner will address the possible amendment of this obligation with DWS.



Non-Potable Drinking Water Supply

Primary Source

MRTTP will continue to utilize R-1 quality effluent from the Kihei Wastewater Reclamation Facility (KWWRF) as its primary source of non-potable drinking water to supply its landscape irrigation demand. Expanded usage of R-1 reclaimed water from the KWWRF offers the dual benefit of conserving potable water and reducing the amount of reclaimed water that the County of Maui must dispose of using injection wells.

The County of Maui Wastewater Reclamation Division which oversees the R-1 reclaimed water system has indicated that there may be periods where the R-1 supply may not be sufficient to accommodate the landscape irrigation needs for the entire MRTTP because of constant fluctuations in the quantity of wastewater treated at the KWWRF and limited R-1 water storage capacity in the County's reclaimed water system. This may be particularly evident during the drier part of the year when the demand for R-1 quality effluent is the greatest.

Therefore, to ensure that there will be a reliable supply of non-potable drinking water available to satisfy MRTTP landscape irrigation demand, additional non-potable drinking water sources and associated storage and distribution infrastructure will need to be constructed to supplement the County of Maui's reclaimed water system.

Supplemental Sources

The "Evaluation of Source of Supply Alternatives for the Planned Expansion of the Maui Research and Technology Park" identified three (3) alternative sources of non-drinking water from the development of new wells for the MRTTP.

Provisions to provide supplemental non-potable drinking water have been incorporated into each of the alternate water sources as follows:

1. Supplemental Source Alternative 1 - Brackish Wells at 580-Foot Elevation.

Under this alternative, the 5 brackish wells at the 580-foot elevation will pump the non-drinking water into a 0.25 MG brackish water head tank located at the 590-foot elevation. A 6-inch waterline from the 0.25 MG brackish water head tank will supply the non-potable drinking brackish water to the non-potable drinking water storage tank at elevation 350 feet that feeds the MRTTP non-potable drinking water system in the event that



there is insufficient R-1 water from the County of Maui Reclaimed Water System available to supply MRTP's irrigation demand. This alternative will require a booster pump station to lift the R-1 quality effluent from the KWWRF - whose ~~nonpotable non-~~drinking water storage tank is located at elevation 300 feet - to the new MRTP offsite ~~non-potable~~ drinking water storage tank at elevation 350 feet.

2. Supplemental Source Alternative 2 - Brackish Wells Within MRTP

Under this alternative, the five (5) brackish wells located within the MRTP will pump the non-drinking water into a 0.25 MG brackish water head tank located within the MRTP site. Brackish water from the 0.25 MG head tank will be used to fill the 0.4 MG ~~non-potable~~ drinking water storage tank located at elevation 202 feet when needed.

Storage and Distribution

A total non-potable water storage capacity 0.4 MG of will be needed to supply the combined irrigation needs of Phases 1 and 2. Source Alternative 1 will utilize a single 0.4 MG capacity concrete or steel storage tank constructed above the MRTP at the 350-foot elevation on land currently owned by Haleakala Ranch Company. Source Alternative 2 will utilize single 0.4 MG capacity concrete or steel storage tank constructed within MRTP at approximately the 202-foot elevation and utilize pumps to provide water pressure comparable to having storage tank at the 350-foot elevation.³¹

A 14-inch distribution main will connect the 0.4 MG storage tank to MRTP, where a new network of 12-, 8- and 6-inch distribution mains will be constructed to supply the individual lots within the development. Figure 3-4 of the Preliminary Engineering and Drainage Report (Appendix F) depicts the ~~non-potable~~ drinking water storage and distribution system described.

³¹ The MRTP non-potable water storage tank will be sited 25 feet lower in elevation than the potable water storage tanks so that water pressure in the non-potable water mains will be approximately 10 psi lower than in nearby potable water mains, thus minimizing the risk of cross-contamination between the two water systems. The introduction of a pressure differential to the reduce cross-contamination hazard between potable and reclaimed water systems is a practice recommended by the State Dept. of Health and observed by the Maui County Dept. of Environmental Management's Wastewater Reclamation Division. (Ref. State of Hawaii, Department of Health, Wastewater Branch, "Guidelines for the Treatment and Use of Recycled Water," May 15, 2002, p.44.)



4. Wastewater

Existing Conditions. The existing lots in the Maui Research and Technology Park (MRTP) are served by a privately owned and maintained wastewater system which collects and conveys their wastewater to the Kihei Wastewater Reclamation Facility (KWWRF) for processing. Existing gravity sewer mains located under existing roads and within designated sewer easements collect wastewater from the existing lots and convey it to an existing sewer pump station located near the western boundary of the MRTP project area. This pump station, in turn, lifts the collected wastewater through a 6-inch force main to a transition manhole located near the southern end of the MRTP project area. The wastewater is then conveyed by a 10-inch gravity sewerline to a second pump station located near the northeast corner of the Kihei Wastewater Reclamation Facility (KWWRF), which then lifts the wastewater through a 6-inch sewer force main directly into the headworks of the KWWRF (See: Figure 2-1 of the Preliminary Engineering and Drainage Report in Appendix F).

The existing sewer pump stations have a capacity of approximately 880 gallons per minute (gpm), or 1.26 million gallons per day (mgd); the 6" force mains can accommodate approximately 880 gpm, or 1.26 mgd, of wastewater flow based on a maximum flow velocity of 10 feet per second in the force main.

The Kihei Wastewater Reclamation Facility (KWWRF), located just south of the MRTP project area, has a treatment capacity of approximately 8 mgd and currently has unused treatment capacity. The facility is also capable of producing R-1 quality effluent; however, the County of Maui's reclaimed water system is only able to utilize about 40 to 50 percent of the R-1 effluent generated by the KWWRF -- most of which is used for irrigation by the limited number of properties now within reach of existing reclaimed water distribution pipelines. The unused R-1 effluent which remains is disposed of through existing injection wells located on the KWWRF site.

Potential Impacts and Mitigation Measures. Wastewater flow projections for the MRTP were developed using land use, land area and unit count data multiplied by corresponding demand rates adopted from the Maui County Wastewater Reclamation Division.³² The computed wastewater flows are summarized in Table 25 26 below.³³

³² Maui County Dept. of Environmental Management, Wastewater Reclamation Division, "Wastewater Flow Standards," February 2, 2000.



Table 25 26, Wastewater Flow Projections

| Type | Flow, Q (mgd) |
|-------------------------------|---------------|
| Total Project | |
| Average Daily Wastewater Flow | 0.50 |
| Design Average Flow | 0.55 |
| Design Maximum Flow | 1.85 |
| Design Peak Flow | 2.31 |
| Phase 1 | |
| Average Daily Wastewater Flow | 0.26 |
| Design Average Flow | 0.29 |
| Design Maximum Flow | 1.12 |
| Design Peak Flow | 1.38 |
| Phase 2 | |
| Average Daily Wastewater Flow | 0.24 |
| Design Average Flow | 0.26 |
| Design Maximum Flow | 1.05 |
| Design Peak Flow | 1.24 |

Proposed Improvements

Wastewater improvements needed for the expansion of MRTP will consist of new gravity sewer mains located primarily within planned roadways to collect wastewater from the developed lots and convey it a new or existing sewer pump station that will then convey the wastewater by force main to the Kihei Wastewater Reclamation Facility for treatment. The expanded wastewater system will be connected to the existing MRTP

³³ Supporting calculations may be found in Appendix A of the Preliminary Engineering and Drainage Report in Appendix F.



system and continue to be privately owned and maintained (See: Figure 2-1 of the Preliminary Engineering and Drainage Report in Appendix F).

Wastewater generated by the northern portion of Phase 1 and the northeastern portion of Phase 2 (Residential and Knowledge Industry Expansion Area) will be collected by gravity sewer mains and conveyed to a new wastewater pump station that will be located at the low point of the collection system near the western tip of the MRTP. The new pump station will then lift the wastewater through a new force main to a new sewer transition manhole located at the high point on Ho'okena Street near the currently developed portion of the MRTP. The wastewater will then continue on through the existing MRTP wastewater system by gravity flow and force main to the KWWRF for treatment.

Wastewater generated from the southern portion of Phase 2 (Knowledge Industry/Campus Area) will be conveyed by gravity sewerline to either the existing sewer pump station at the western boundary of MRTP or the existing pump station near the southern end of the MRTP close to the KWWRF. The wastewater will then be conveyed by force main from either pump station to the KWWRF for treatment.

Incremental improvements to increase the capacity of the existing MRTP wastewater pumping system will be required to accommodate the larger design peak wastewater flows generated by development Phases 1 and 2 as they are built out. Capacity improvements and modifications to the existing force main connection at the headworks of the KWWRF may also be required by the County of Maui to accommodate the increased wastewater flow into the facility.

The MRTP has an agreement allowing a wastewater connection and discharge of up to 25,000 gallons per day (gpd) into the existing private wastewater gravity and pump station/force main system in the adjoining Signature Homes Development located west of the MRTP. This wastewater flow is ultimately conveyed to the existing MRTP wastewater pump station located near the western boundary of the MRTP project area. It is not anticipated that the MRTP will exercise this option; however, this option remains available should circumstances change.



Treatment Capacity

The County of Maui currently treats an *actual* average daily wastewater flow of approximately 3.4 mgd at the Kihei Wastewater Reclamation Facility. Wastewater Reclamation Division records indicate that cumulative *allocated* wastewater flows at the KWWRF total approximately ~~6.75~~ 6.8 mgd as of ~~June 30, 2011~~ November 20, 2012. The KWWRF has a treatment capacity of 8 mgd; therefore, the amount of treatment capacity which remains available is 4.6 mgd based on *actual* average daily flows, or ~~1.25~~ 1.2 mgd based on *allocated* wastewater flows. Since the design average wastewater flow from the MRTP is expected to be approximately ~~0.55~~ 0.6 mgd, there is currently sufficient treatment capacity available to accommodate the project.

The County of Maui, under the provisions of Hawaii Administrative Rules, Title 11, Chapter 62 - Wastewater Systems, Section 23.1, is required to initiate a facility plan when the *actual* wastewater flow reaches 75 percent of the plant design capacity and implement the facility plan when the actual wastewater flow reaches 90 percent of the plant design capacity. Consequently, treatment capacity at the KWWRF should remain sufficient to accommodate development of the MRTP over time.

5. Electrical³⁴

Existing Conditions. Maui Electric Company's (MECO) Maalaea Power Plant serves the Kihei-Wailea region from the Kihei and Wailea Substations, which are connected by a 69kV (kilo-volt) overhead transmission line that runs along the western shoulder of Piilani Highway.

The Kihei Substation serves the MRTP area. The substation transformers convert the 69kV transmission power to 12.47kV distribution power. 12.47kV distribution power is then transmitted, via primary overhead lines that are under-built below the previously mentioned 69kV overhead transmission lines. On East Lipoa Street, the overhead distribution lines are fed into an underground distribution system, which currently is tied into the MRTP main feed.

³⁴ Summary prepared by ECM, Inc., January 2012.



Potential Impacts and Mitigation Measures. When fully built out, the electrical demand for the Master Plan update is forecast to be 38,750 kilowatts. Based on the anticipated demand, MECO anticipates a new substation be required in the first page of the project—along with associated electrical infrastructure, equipment and related easements.

Current plans for the project include adequate land for locating a new substation. Additionally, the project proposes to underground existing overhead power lines that run north south along the mauka boundary of the southern portion of the project. These lines will be placed underground as the project is built out from the existing employment core towards the south. The developer will coordinate closely with MECO to ensure adequate service is provided.

6. Communication and Cable TV Systems

Existing Conditions. Hawaiian Telcom, Sandwich Isles Communications, Time Warner Telecommunications, and Wavecom Solutions provide telephone and data connectivity service in the Kihei region, including MRTP. Oceanic Time Warner Cable provides cable television service. The telecommunications infrastructure from the providers servicing the area consists of both overhead and underground facilities.

Currently, Hawaiian Telcom, Time Warner Telecommunications, and Wavecom Solutions have underground systems in place at MRTP, but additional underground infrastructure may need to be installed to accommodate the proposed residential and commercial addition. Sandwich Isles Communications is currently sharing conduit and other infrastructure with another provider, but is planning to have a separate dedicated system in MRTP in the future.

Oceanic Time Warner Cable has one node servicing all of the residential lots in the area and another node servicing all the commercial lots. They feel that everything that is being proposed to be built on this project can be serviced with current nodes, which should be adequate for a while. However, in the event that additional nodes are needed, Oceanic Time Warner Cable will initiate their installations.



IV. RELATIONSHIP TO GOVERNMENTAL PLANS, POLICIES, AND CONTROLS

A. CHAPTER 343 HAWAII REVISED STATUTES

This EIS has been prepared in accordance with the provisions of Chapter 343, HRS, (Environmental Impact Statement Law) and Title 11, Chapter 200, HAR, Environmental Impact Statement Rules.

Section 343.5 HRS, establishes nine “triggers” that require the preparation of an Environmental Assessment (EA) or EIS. The trigger for the MRTP includes a Community Plan Amendment.

In addition, creation of the MRTP may involve or impact State and or County lands, or funds relating to infrastructure improvements for public facilities, roadways, water, sewer, utility, drainage, or other facilities. This EIS is intended to address all current and future instances involving the use of State and/or County lands and funds relating to the MRTP.

B. STATE LAND USE

Chapter 205, Hawaii Revised Statutes, relating to the Land Use Commission (LUC), establishes four (4) major land use districts in which all lands in the state are placed.



These districts are designated as *Urban, Rural, Agricultural, and Conservation*. The lands of the MRTP lie within the State *Urban* and *Agricultural* districts. Refer to Figure 5, “State Land Use Map”.

The proposed Master Plan Update will require a State Land Use District Boundary Amendment from *Agricultural to Urban* for certain lands in the MRTP. The total land area expected to be affected comprises approximately ~~256.243~~ 253.5 acres and is identified by Tax Map Parcels (2) 2-2-024:16 and 17 and a portion of (2) 2-2-002:54 (hereafter “Parcels 16, 17, and 54 por”). Additionally, the proposal would require amendments to the conditions placed upon currently urbanized lands, comprising approximately 157.76 acres.

Decision making criteria to be used in the LUC review of petitions for reclassification of district boundaries is found in Section 205-17, HRS and Section 15-15-77, HAR. In addition, standards for determining the Urban district are contained in Section 15-15-18. The following is an analysis of how the MRTP Master Plan Update conforms to these criteria and standards.

205-17 Land Use Commission decision making criteria. In its review of any petition for reclassification of district boundaries pursuant to this chapter, the commission shall specifically consider the following:

1. *The extent to which the proposed reclassification conforms to the applicable goals, objectives, and policies of the Hawaii State Plan and relates to the applicable priority guidelines of the Hawaii State Plan and the adopted functional plans;*

Analysis:

The MRTP conforms to the goals, objectives, and policies of the Hawaii State Plan and functional plans as more fully described in Section IV.C of the EIS.

2. *The extent to which the proposed reclassification conforms to the applicable district standards; and*

Analysis:

Conformance of the MRTP to the Urban District Standards is discussed in this section’s analysis of HAR Section 15-15-18.



- *The impact of the proposed reclassification on the following areas of State concern:*
 - A. *Preservation or maintenance of important natural systems of habitats;*

Analysis:

A Flora and Fauna Assessment were prepared as part of this EIS (See: Section II 5 and Appendix C). The purpose of the Flora and Fauna Assessment was to conduct a visual survey of the MRTP and document species of flora and fauna found on the property. Based on the results of the Flora and Fauna Assessment and consultation with the Fish & Wildlife Service (See: Appendices C-3, 4, 5, and 6 and Tables 27 and 28) the following measures will be taken to mitigate potential impacts to important natural systems or habitats:

- **Avoid Direct Impacts to Hawaiian Hoary Bats.** Woody plants greater than fifteen (15) feet tall will not be removed or trimmed between June 1 and September 15.
- **Minimize Light Impacts to Seabirds.** Outdoor lights will be shielded so that the bulb can only be seen from below.
- **Minimize Attraction and Impacts to Listed Birds.** Expansion of the MRTP will not involve the creation of golf course(s) or permanent open water features. Tenants will be expected to comply with Maui County leash laws. Maui R&T Partners, LLC will institute a pest control program administered by groundskeepers aimed primarily at rodent and feral animal control.
- **Avoid or Address Impacts to the Blackburn's Sphinx Moth.** No Blackburn's sphinx moths (BSM) were identified on the property during the Flora and Fauna surveys. Additionally, no know larval host plants for the BSM have been observed within the MRTP property. However, as requested by the Fish & Wildlife Service in their letter dated June 7, 2011, another comprehensive survey for endangered BSM host plants will be conducted just prior to land clearing.
- **Survey for Yellow-Faced Bees and Protected Plant Species.** Biologists found no listed or candidate endangered plants species, and they stated that it is highly unlikely that the MRTP properties are habitat for Hawaiian yellow-faced bees.
- **Minimize Wildfire Impacts.** During project construction, measures will be taken to maintain a sufficient fire break along the boundaries of the proposed MRTP



expansion. When fully developed, the MRTP will displace non-native grass, weed, and scrub fuels from an area of approximately 414 acres. The Applicant will also work with the County Fire Prevention Bureau to minimize potential wildfire risks within and adjacent to the MRTP footprint. The Applicant will continue to coordinate with the USFWS on wildfire prevention and response measures throughout the planning process.

- **Minimize the Spread of Invasive Species.** Maui R&T Partners, LLC will ensure that off-site sources of revegetation materials (seed mixes, gravel, mulches, etc.) are certified weed-free. All areas that are hydroseeded will be monitored for six months after hydroseeding to ensure removal of any invasive plants that have established from seeds inadvertently introduced as part of the seed mixes. Building supplies imported to Maui for construction will be regularly inspected at Kahului Harbor for presence of alien species.

B. Maintenance of valued cultural, historical, or natural resources;

Analysis:

The EIS includes an Archaeological Inventory Survey (Appendix D), a Cultural Impact Assessment (Appendix E), a Flora & Fauna Assessment (Appendix C-1 and C-2), and a Drainage Report (Appendix F).

Archaeological Resources:

No significant archaeological resources were identified by archaeologists preparing the project's Archaeological Inventory Survey. In a letter dated October 27, 2008 the State Historic Preservation Division determined that the AIS was acceptable and recommended that Site -6241 should be bordered by protective orange construction fencing prior to ground altering activities. (See: Appendix D-1). No other mitigation measures were recommended.

Cultural Resources:

The Cultural Impact Assessment (CIA) prepared for the project identifies the MRTP site as being located in an area described as the "Barren Zone". Based on the limited archaeological resources identified after completion of the Archaeological Impact Assessment and historical research presented in the Cultural Impact Assessment, it was con-



cluded that the project site was not subject to permanent or expansive population due to the lack of productive natural resources (water, soil, etc.). There were no visible cultural resources (i.e. medicinal plants, shoreline resources, religious sites, or archeological resources) observed on the property. From a cultural practices and beliefs perspective, the subject property bears no apparent signs of cultural practices or gatherings currently taking place, and none were identified during the extensive interviews conducted with local residents as part of the CIA. Therefore, the CIA concluded that development of the site will not impact cultural resources on the property or within its immediate vicinity. (See: Appendices D & E)

Natural Resources:

With the incorporation of the mitigation measures described in this report, natural resources will not be impacted by the project.

Flora & Fauna Resources:

See analysis provided in Section III.A.5

Coastal Water Quality:

The proposed drainage system will be designed in accordance with Chapter 4, "Rules for the Design of Storm Drainage Facilities in the County of Maui." The drainage design criteria will be to minimize any alterations to the natural pattern of the existing onsite surface runoff. The drainage system will be designed to detain any additional runoff created by the development on-site so as not to impact downstream properties.

Moreover, stormwater runoff during site preparation will be controlled in compliance with the County Code Chapter 20.08 "Soil Erosion and Sediment Control Minimum BMPs". Typical mitigation measures are appropriately stockpiling materials on-site to prevent runoff and building over or establishing landscaping as early as possible on disturbed soils to minimize length of exposure. A NPDES permit will also be required as mentioned in Section III.D.3 Drainage.

C. Maintenance of other natural resources relevant to Hawaii's economy, including, but not limited to, agricultural resources.

Analysis:



The development of the MRTP site is not expected to impact natural resources relevant to Hawaii's economy. The State of Hawaii's Agricultural Lands of Importance to the State of Hawaii (ALISH) study identifies the soils of the MRTP site as "Unclassified" and therefore not considered to be of agricultural importance to the State. The project will not impact prime agricultural lands and will not reduce the inventory of quality agricultural land on Maui (See: Section III.A.10, "Agricultural Resources").

The development of the MRTP site is also not anticipated to negatively impact the County's potable ground waters. A water source development study was conducted and is included in Appendix J I. Should County water not be available, the project anticipates sourcing its waters from on- or off-site wells drawing brackish groundwater from the Kamaole Aquifer. The pumpage from the wells will be well within the State Commission on Water Resources Management's (CWRM's) definition of the sustainable supply for such as aquifer. In addition, the subject wells should have minimal impact on the quality of the region's ground water resources. It is anticipated that the subject development may produce a slight increase in nitrogen of between 0.8 to 0.9 percent and in phosphorus of .03 to .04 percent, which should produce minimal impact to ground water quality. Any source of water for the project will be developed and managed in a manner that complies with all State and County laws. In developing the property, Best Management Practices will be incorporated to mitigate potential impacts to the State's freshwater and estuarine environment.

D. Commitment of State funds and resources;

Analysis:

Use of State or County funds could include some increase in funding for infrastructure and public facilities needed to service population growth. However, the developer anticipates funding the project's on-site infrastructure and contributing a pro-rata share towards off-site infrastructure and public facility costs directly attributable to the project as required by current state and county regulations. The project will also contribute to State and County revenues through payment of property taxes and general excise taxes from businesses within the MRTP. The Economic and Fiscal Impact Assessment Report in Appendix I anticipates that project related revenues to the State and County will exceed public sector costs to service the project, as follows:



- The County of Maui will realize Real Property and Transient Accommodation taxes, other secondary receipts and impacts fees of \$141.3 million during the 19-year construction and absorption period, and 28.5 million annually on a stabilized basis thereafter. The net benefit to the County will be \$25.3 million during development, and \$21.5 million annually on a stabilized basis.
- The State of Hawaii will receive Gross Excise, Income, Transient Accommodation taxes, secondary revenues and impact fees of \$752.5 million during the build and sales projection timeframe, and \$80.4 million per year thereafter. The net benefit to the State will be in excess of \$466.3 million during development, and a stabilized 'profit' of \$57.3 million per year.

*E. Provision of employment opportunities and economic development;
and*

Analysis:

The MRTP was the vision of a core group of community leaders in the early 1980's who sought to diversify the economic and employment base on Maui beyond tourism and agriculture. These efforts to diversify Maui's economy by creating the requisite infrastructure (like the MRTP) were made possible via public/private alliances. The MRTP is now the locus for technology activity on Maui. Since its inception in the late 1980's, the approximate ~~414~~ 411 acre MRTP is only at approximately 10 percent build-out. However, it is home to such prominent employers as Akimeka, Boeing, The Pacific Disaster Center, and the U.S. Air Force. Companies at the Park currently employ approximately 400 people in a variety of high technology and supporting industries. Over twenty years have passed since the original controlling documents for the development have been updated. Today, the original controlling documents are seen as being too restrictive and burdensome to fully capture the diverse opportunities in knowledge-based industry development that could be attracted to the Park. The development plan for MRTP needs to conform to current state of the art practices in modern, successful employment centers in order to deliver the economic development benefits desired by the community.

As described in Section III.B.3 of the DEIS, fuller development of the MRTP is expected to generate short-term economic benefits in the form of construction-related employment, as well as long-term benefits that include increased permanent employment and



tax revenues. It is estimated that the Park will generate circa \$1.39 billion in capital investment into the island's economy. The construction of the Park and on-going operations and maintenance of the residences, on-site commercial and industrial/businesses, and community facilities, will provide an estimated 63,507 "worker-years" of employment and \$2.7 billion in total wages over a 19-year period. After "stabilization" the urban village community will support some 5,878 permanent jobs on-site with an annual payroll of about \$217 million, and an additional 1,469 workers with \$68.6 million in yearly wages off-site. The net benefits to the State on an annual basis after build-out (tax collections minus service costs) will be \$57.3 million and \$21.5 million to the County. In addition to the direct economic impact, the project will stimulate economic development outside of the Park. The base economic impact on Maui will total \$7.8 billion during build-out and \$903.9 million annually upon stabilization.

F. Provision for housing opportunities for all income groups, particularly the low, low-moderate, and gap groups; and

Analysis:

The Master Plan's mixed-use concept will provide diverse housing opportunities to employees working within the MRTP and other local residents. These homes will all be located within walking and biking distance of numerous jobs. The project will comply with the County's workforce housing ordinance, which requires that subdivisions provide housing to low, low-moderate and gap groups.

According to the Economic and Fiscal Impact Assessment prepared for the Project (See: Appendix I H), the demand for new residential units in the Kihei-Makena Corridor will be from 7,760 to 12,009 over the next 24 years (through 2035). The number of existing unsold and planned resident housing units within the Draft Maui Island Plan's regional "Urban Growth Boundary", excluding the MRTP, totals approximately 6,634 units. This indicates there will be a shortfall in the sector of from 1,126 to 5,375 new residential units. The study's analysis indicates that there will be sufficient unmet demand to absorb the Project's 1,250 units. Of the future demand for resident housing within the region, it is estimated that approximately 43% will be for units priced to be affordable up to 140 percent of the County's median household income, as determined by the United States Department of Housing and Urban Development (HUD). Future demand esti-



mates conclude that approximately 56 percent of the Project's units will be single-family and 44 percent multi-family.

4. *The representations and commitments made by the petitioner in securing a boundary change.*

Analysis

The representations and commitments made by the petitioner are in the Applicant's Petition for District Boundary Amendment (Docket No. A10-787). Copies of the Applicant's petition were served upon the parties required by law on June 23, 2010. ~~2010-1-~~

15-15-77 Decision making criteria for boundary amendments. (a) *The commission shall not approve an amendment of a land use district boundary unless the commission finds upon the clear preponderance of the evidence that the proposed boundary amendment is reasonable, not violative of section 205-2, HRS and consistent with the policies and criteria established pursuant to sections 205-16, 205-17, and 205A-2, HRS.*

(b) *In its review of any petition for reclassification of district boundaries pursuant to this chapter, the commission shall specifically consider the following:*

(1) *The extent to which the proposed reclassification conforms to the applicable goals, objectives, and policies of the Hawaii State Plan and relates to the applicable priority guidelines of the Hawaii State Plan and the adopted functional plans;*

(2) *The extent to which the proposed reclassification conforms to the applicable district standards;*

(3) *The impact of the proposed reclassification on the following areas of State concern;*

A. *Preservation or maintenance of important natural systems of habitats;*

B. *Maintenance of valued cultural, historical, or natural resources;*

C. *Maintenance of other natural resources relevant to Hawaii's economy, including, but not limited to, agricultural resources.*

D. *Commitment of State funds and resources*

E. *Provision of employment opportunities and economic development; and*

F. *Provision for housing opportunities for all income groups, particularly the low, low-moderate, and gap groups; and*

(4) *In establishing the boundaries of the districts in each county, the commission shall give consideration to the general plan of the county in which the land is located;*

Analysis:

Criteria 1, 2, and 3 were addressed in the analysis of Section 205-17, HRS above and Section 15-15-18, HAR below. In response to Criteria 4, the MRTTP is consistent with the



goals, objectives and policies of the ~~draft~~ Maui Island Plan and the Kihei-Makena Community Plan (See: Section IV.F). A Community Plan Amendment will be requested to bring the ~~entire~~ MRTP site into a Community Plan designation that better aligns with the Master Plan Update.

(5) The representations and commitments made by the petitioner in securing a boundary change, including a finding that the petitioner has the necessary economic ability to carry out the representations and commitments relating to the proposed use or development; and

(6) Lands in intensive agricultural use for two years prior to date of filing of a petition or lands with a high capacity for intensive agricultural use shall not be taken out of the agricultural district unless the commission finds either that the action:

(A) Will not substantially impair actual or potential agricultural production in the vicinity of the subject property or in the County or State; or

Analysis:

The Project is not expected to impact the long-term viability or growth of agriculture on Maui. The EIS includes an Agricultural Impact Assessment (See: Section III.A.10 and Appendix ~~K~~ J) which concludes that the low soil ratings and lack of irrigation water make the property poorly suited for growing commercial field crops (See: Appendix ~~K~~ J “Agricultural Study”). In addition, the State of Hawaii’s Agricultural Lands of Importance to the State of Hawaii (ALISH) study identifies the soils of the MRTP site as “Unclassified” and therefore not considered to be of agricultural importance to the State.

The MRTP project would eliminate 39 acres of grazing land being used by Haleakala Ranch, or only about 0.16% of the 23,000 acres of their total grazing land. The Ranch anticipates that this small reduction will not have a meaningful impact on the cattle operations, including the size of their herd, production, revenues or employment, as the Ranch has sufficient lands to move its cattle to other pastures.

Additionally, the MRTP site will not impair surrounding agricultural production. Monsanto currently has a seed corn farming facility to the south of the MRTP; however the Project is not expected to impact this operation. The Monsanto property is over 300 acres and the northernmost field used for growing seed corn is approximately .25 miles from the southeast corner of the southernmost expansion area of the Project.



Land makai of the MRTP is developed, land to the north is to be developed as the new Kihei High School and land mauka of the site will remain in cattle ranching.

B) Is reasonably necessary for urban growth.

Analysis:

A market study was conducted for the project by the Hallstrom Group Inc. and is included in the Economic and Fiscal Impact Assessment report in Appendix I H. The market study forecasts demand for commercial, industrial and residential development within Kihei-Makena through the 2035 planning horizon.

The "Kihei-Makena Study Area" is a suburban coastal community, with residential-oriented uses in the inland areas (housing units, neighborhood commercial and limited industrial), and resort/vacation-oriented uses dominating the shoreline (condos, hotels, timeshare and destination resorts). It has expanded dramatically in the past three decades, growing four-fold in resident population, adding nearly one million square feet of commercial and industrial floor area and more than 2,500 visitor units, and evolving into a major hub of Maui investment and business activity. Forecasts are the study area population will increase from the current figure of 27,500 to between 42,000 to 46,000 by 2035 (a gain of 53 to 67 percent), and increase its importance in the island's economy; particularly as Makena Resort experiences further development and the Maui Research & Technology Park (MRTP), Honuaula and other masterplanned projects are manifest.

Kihei-Makena is presently a secondary commercial center of Maui, meaningfully behind Kahului-Wailuku, with an estimated 700,000 square feet of commercial floor space, or 16 percent of the island total. As Kihei-Makena contains 24 percent of the de facto population of Maui, it can be asserted it is "under-serviced". The vacancy rate on the island for retail restaurant and service/support commercial floor space is currently at just over nine percent; the highest level in many years. Rents have stabilized since mid-decade, and net absorption for the year was a negative 11,297 square feet, the smallest loss since 2008, and an indication the sector has stabilized and is likely to return to a positive absorption stance in 2012-13. Tenant stability is relatively high in Kihei-Makena (particularly compared to West Maui), with increasing interest being expressed in vacant bays as the market continues through its recovery phase.



The study area industrial space sector has approximately 850,000 square feet of inventory, or less than eight percent of the total amount built on Maui; again, indicating the region is under-serviced. The majority of space is in storage/warehousing, staging, small businesses and quasi-commercial uses. Island-wide the vacancy rate for industrial floor area is about 2.0 percent (well below the State average of 4.8 percent), and though the sector showed a negative absorption of 74,764 square feet in 2011, the fourth quarter achieved a meaningfully positive absorption of 48,444 square feet; a sign of initial recovery. Brokers report a renewed interest in Greater Kihei industrial spaces, with several owner/user and multi-tenant buildings under construction or in the final approval stages.

The following summarizes the market study's conclusions:

- The demand for new residential units in the Kihei-Makena Corridor will be from 7,760 to 12,009 units over the next 24 years to 2035. The number of existing unsold and planned resident housing units within the Draft Maui Island Plan's regional "Urban Growth Boundary", excluding the MRTP, totals some 6,634 units. This indicates there will be a shortfall in the sector from 1,126 to 5,357 new residential units; with a mid-point under-supply of 3,251 units. The analysis indicates there will be sufficient unmet demand to absorb the 1,250 units of subject inventory.
- The proposed 750 single-family units will require approximately 14 years to be absorbed following commencement of pre-sales in 2017.
- The proposed 500 multifamily units will sell-out within 13 years.
- There will be demand for an additional 907,000 to 1,506,000 million square feet of gross leasable floor space in Kihei-Makena by 2035, more than doubling the existing inventory, as Kahului lands are built-out, the Kihei population continues to increase, and the importance of the study area in the island's economy expands. This equates to an additional 83 to 141 acres of vacant gross land area to support expected market needs.
- Assuming historic economic trends continue it is estimated that the demand for additional industrial floor space on Maui over the next 24 years (through 2035) will total from 5.3 million to 6.7 million square feet, an increase of from 49 to 63 percent above current levels. This equates to a demand for between 466 to 599 gross acres of underlying sites at prevailing "business park" densities; signifi-



cantly more acreage (two to three times greater) if base yards, quarries, and open storage uses are included.

- On a gross basis, there is sufficient existing and proposed vacant industrial land on the island to meet demand, with some 2,000 potential acres apart from the already zoned subject holdings. However, this acreage includes heavy industrial, restricted use (airport and harbor), agricultural-oriented (Puunene sugar mill), dump and waste transfer sites, outlying locations, and other noncompetitive properties which severely decrease the amount of land available to meet demand.
- Based on its locational attributes, timing of development, availability of competitive sites in Kihei-Makena, revisions to the restrictions in MRTP, and other factors, it is estimated that the subject project could capture from 1.1 million to 1.5 million square feet of the projected demand on Maui under an "historic economic growth trend" perspective (with a mid-point of 1.3 million square feet); or about 21 percent of the island-wide demand during the projection period.
- As the Maui economy continues to grow and diversify over the next generation, there could be numerous educational, institutional and business/R&D uses possibly seeking out a Maui location. Such uses require from 30 to 200 acre sites for facilities/campuses of between 300,000 and 1.1 million square feet of floor space.

C) Amendments of a land use district boundary in conservation districts involving land areas fifteen acres or less shall be determined by the commission pursuant to this subsection and section 205-3.1, HRS.

Analysis:

Not Applicable

(D) Amendments of land use district boundary in other than conservation districts involving land areas fifteen acres or less shall be determined by the appropriate county land use decision-making authority for the district.

Analysis:

Not Applicable

(E) Amendments of a land use district boundary involving land areas greater than fifteen acres shall be determined by the commission, pursuant to this subsection and section 205-3.1, HRS.



Analysis:

In accordance with Section 205-3.1, HRS and Subsection 15-15-77, HRS, the Applicant has filed a Petition for District Boundary Amendment (Docket No. A-10, 787).

Sec 15-15-18, Hawaii Administrative Rules. The proposed boundary reclassification is consistent with the following standards of the Urban District, Sec 15-15-18, Hawaii Administrative Rules:

1. *It shall include lands characterized by "city-like" concentrations of people, structures, streets, urban and other related land uses.*

Analysis:

The Agricultural district portion of the MRTP project site is located immediately adjacent to existing commercial uses in the Park, which comprise a major employment center for the island. Along the Project's western boundary are the Elleair Golf Course and the Hokulani residential subdivision. Across Piilani Highway, and within close proximity of the MRTP, are an intermediate and elementary school, the South Maui Community Park, Kihei Aquatic and Community Center, Piilani Shopping Center and a variety of business and commercial services along with single-family and multi-family residential development.

2. *Proximity to centers of trading and employment except where the development would generate new centers of trading and employment;*

Analysis:

The Agricultural land of the project area is adjacent to an existing center of trading and employment, specifically the MRTP, which is home to such prominent employers as Akimeka, Boeing, The Pacific Disaster Center, and the U.S. Air Force who currently employ approximately 400 people in a variety of high technology and supporting industries. The project area is also located within close proximity to one of three commercial nodes located in central Kihei. The Piilani Shopping Center, Azeka Shopping Center, and Lokelani Intermediate School, along with numerous professional and business services are all located a short distance from the Petition Area and generate substantial employment. In addition, the Kihei-Makena Community Plan and the recently completed draft Maui Island Plan envision the MRTP, including the Agricultural land, becoming an even larger and more important regional employment center for the island.



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

Analysis:

Basic public services and facilities, such as transportation systems, sewer, water, drainage and public utility hook-ups are available in close proximity to the MRTP. All of the drainage improvements for the proposed development will comply with County of Maui standards. The County of Maui currently provides solid waste disposal service to single-family residences in the area. The MRTP is also adjacent to Piilani Highway, a major roadway serving the general Kihei area. Lipoa Parkway provides direct access from the MRTP to nearby shopping, schools, and business and commercial services west of Piilani Highway.

The Agricultural lands of the project area have poor soil conditions, limited topography, and are close to existing infrastructure making the subject property a suitable location for the proposed development. Section III.D (Infrastructure) details the preliminary engineering and drainage analyses conducted for the proposed development. Schools and several parks are located in close proximity to the MRTP, such as the three (3) Kamaole Beach Parks, Charley Young Park, Kalama Park and South Maui Community Park. Other recreational facilities include the Kihei Aquatic Center and the Kenolio Recreational Complex, both a short distance from the MRTP. It should be noted that the proposed development will also include a number of open space and park areas, which will help to mitigate vehicular traffic to and from the subject property.

The State Department of Education's public school system in the Kihei region includes Kamalii and Kihei Elementary Schools (Grades K to 5), Lokelani Intermediate School (Grades 6 to 8) and Maui and Kihei Public Charter High School (Grades 9 to 12). The Kihei Charter School provides K-12 classes within close proximity of the project site at Lipoa Center and Kihei Commercial Center. The future Kihei High School is proposed for development adjacent to the northwestern boundary of the subject property, along Piilani Highway, and the State Department of Education is preparing and processing an Environmental Impact Statement for this development. Once developed, the MRTP will be within walking distance of an elementary, intermediate and high school. In addition,



project plans propose public and/or private educational facilities within the Project site to mitigate demand generated by the Project's development.

Police protection for the Kihei area is provided by the Maui County Police Department, with the existing Kihei Station located approximately 2.5 miles from the MRTP. In addition, a new region-serving police station is planned approximately 1 mile south of the Project site on the *mauka* side of Piilani Highway. Likewise, fire protection for the Kihei area, which encompasses fire prevention, suppression, rescue, and emergency services, is provided by the Maui County Fire Department, with the Kihei Fire Station located at 11 Waimahaihai Street, approximately 1 mile from the MRTP. The proposed development will not result in any extension of the existing service area limits for these emergency services

4. *Sufficient reserve areas for foreseeable urban growth.*

Analysis:

The Master Plan Update addresses a total of approximately ~~414~~ 411 acres. Significantly, all of the Master Plan Update lands are community plan designated Project District 6, "Research & Technology Park" except for Parcel 17, which is designated Public/Quasi-Public. Of the total ~~414~~ 411 acres, approximately 157.76 acres are designated Urban and ~~256.243~~ 253.50 acres Agricultural. With the requested District Boundary Amendment the MRTP will have sufficient urban lands to accommodate the land uses contemplated in the Master Plan. Having sufficient land area is necessary to reduce costs and delays associated with land use redistricting that would otherwise be born by prospective investors.

The MRTP's overarching purpose is to spur research and technology and other knowledge-based industry development on Maui and to expand and diversify the island's economic and employment base. The previous master plan has had limited success in accomplishing this mission; and a new approach is necessary if the Park is to achieve the community's economic development goals.

The earlier Park vision was that of a single-use large-lot campus with strict controls over the types of uses allowed within the Park. This approach has made it prohibitively expensive for many high technology-based businesses to locate in the Park. Moreover, strict zoning controls have limited the availability of support services for businesses and



employees. Extensive study by the Applicant of successful research and technology parks on the mainland has shown that technology and other knowledge-based industries are attracted to locations offering not only office and lab space, but also support services and amenities, including a mix of housing opportunities for employees, commercial, retail, and professional services, parks and open space. These types of development patterns reduce commuting, decrease the cost of doing business, energize communities, and facilitate a greater sense of place and quality of life.

In keeping with the key success factors identified at prominent mainland parks, the Master Plan Update proposes a mixed-use village center and residential and civic components to complement existing and future technology and other knowledge-based industry development. In addition, a greater diversity of lots will be made available, ranging from small lots and commercial spaces for start-ups to very large parcels for large institutional and corporate users.

The MRTP will be utilized for these, technology, and other knowledge-based industry uses, as well as complimentary commercial and residential areas in accordance with the draft Maui Island Plan. Re-districting the Agricultural portion at this time will allow the Applicant to react more quickly to market forces and meet demand as it arises, without the risk of significant delays associated with incremental redistricting.

5. *It shall include lands with satisfactory topography, drainage, and reasonably free from the danger of any flood, tsunami, unstable soil condition, and other adverse environmental effects.*

Analysis:

Elevations across the project site range from approximately 270 feet above Mean Sea Level (MSL) along the easterly boundary to approximately 160 feet MSL along the westerly boundary and approximately 73 feet at the Lipoa Parkway / Piilani Highway intersection. The average slope across the project site is 3.2%, although there are variations in the slopes on the knolls and gullies within the MRTP site.

As indicated by the Flood Insurance Rate Map, the MRTP is located within Zone X, which is outside of any flood hazard. The MRTP is not subject to tsunami, unstable soil



conditions or other adverse environmental effects which would render it unsuitable or inappropriate for the proposed development.

- 6. Land contiguous with existing urban areas shall be given more consideration than non-contiguous land, and particularly when indicated for future urban use on state or county general plans.*

Analysis:

As reflected on the State Land Use Classification map, the Agricultural land is immediately adjacent to areas which are already designated "Urban", including Urban land that is already part of the MRTP. In addition, the Agricultural land itself is within the ~~draft~~ Maui Island Plan's Urban Growth Boundary and is also designated by the Kihei-Makena Community Plan for urban use, i.e. "Project District 6, "Research & Technology Park District" (Parcels 16 and 54) and Public/Quasi-Public (Parcel 17)". The Applicant will be filing a community plan amendment to change these designations to "Kihei Maui Research & Technology Park District". Concurrently with the filing of the community plan amendment, changes will be made to Maui County Code Title 19.33, "Kihei Research & Technology Park District" to allow for mixed-use development within the Park, in accordance with the Master Plan Update and an accompanying form-based development code.

As noted under Standard No. 2 above, the Agricultural land is contiguous to existing urban areas, including existing developed portions of the MRTP, the Elleair golf course and the Hokulani residential subdivision. In addition, the future South Maui High School is proposed on lands adjacent to the Project's northwestern boundary. Just west of the MRTP, across Piilani Highway, are commercial, civic, and residential developments within central Kihei.

- 7. It shall include lands in appropriate locations for new urban concentrations and shall give consideration to areas of urban growth as shown on the state and county general plans.*

Analysis:

Given the "Project District 6" designation of the MRTP by the Kihei-Makena Community Plan and the placement of the Project area within the Urban Growth Boundary by the ~~draft~~ Maui Island Plan, the Agricultural land is in an appropriate location for new urban concentration and growth. Both of these plans envision the MRTP becoming an



even larger employment center, and with existing infrastructure and public facilities in close proximity, balancing employment with housing and services is a central tenet of smart growth.

8. *May include lands which do not conform to the standards in paragraphs (1) to (5):*
 - (A) *When surrounded by or adjacent to existing urban development; and*
 - (B) *Only when those lands represent a minor portion of this district;*

Analysis:

While the Applicant believes the Agricultural land conforms with the standards in paragraphs (1) to (5) of HAR § 15-15-18, it is significant to note that the Agricultural land is immediately adjacent to existing urban development such as the MRTP and other residential subdivisions in the immediate area. Because of the Agricultural land's proximity to existing and planned urban development, the projected demand for additional housing in the area, and the number of jobs directly and indirectly created by the Park, any potential impact to agriculture is significantly outweighed by the benefits of the proposed development. This is especially true since the Agricultural land is poorly suited to agriculture and considerable agricultural land remains available on the island of Maui and in South Maui to support the growth of diversified agriculture.

9. *It shall not include lands, the urbanization of which will contribute toward scattered spot urban development, necessitating unreasonable investment in public infrastructure or support services.*

Analysis:

Urbanization of the Agricultural land of the Project area will not contribute to scattered spot urban development. The Agricultural land is located adjacent to, and will become part of, the existing urban uses in the MRTP and other residential and commercial subdivisions in the area.

The proposed development will not necessitate unreasonable public investment in infrastructure facilities or public services. The Applicant will be engaging in infrastructure improvements to mitigate any potential impacts of the proposed development.

10. *It may include lands with a general slope of twenty per cent or more if the commission finds that those lands are desirable and suitable for urban purposes and*



that the design and construction controls, as adopted by any federal, state, or county agency, are adequate to protect the public health, welfare and safety, and the public's interests in the aesthetic quality of the landscape.

Analysis:

The Agricultural land of the project area is characterized by an average slope of four (4) percent.

The proposed boundary reclassification of the Agricultural land of the project area would provide additional urban land surrounding the existing urban lands of the MRTP. The site is not suitable for productive agricultural land use and is better suited for urban development. The proposed development would provide additional opportunities for housing and employment because a portion of the MRTP is already developed as an employment center. Basic services such as schools, parks, wastewater systems, solid waste disposal, drainage, water, transportation systems, public utilities, and police and fire protection are in close proximity to the site. The MRTP is currently within the General Plan’s Urban Growth Boundary.

C. HAWAII STATE PLAN

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| Hawaii State Plan, Chapter 226, HRS Part 1. Overall Themes, Goals, Objectives and Policies Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable | S | N/S | N/A |
| HRS 226-1: Findings and Purpose | | | |
| HRS 226-2: Definitions | | | |
| HRS 226-3: Overall Theme | | | |
| <p>HRS 226-4: State Goals. In order to guarantee, for the present and future generations, those elements of choice and mobility that insure that individuals and groups may approach their desired levels of self-reliance and self determination, it shall be the goal of the State to achieve:</p> <ol style="list-style-type: none"> 1. A strong, viable economy, characterized by stability, diversity, and growth, that enables the fulfillment of the needs and expectations of Hawaii’s present and future generations. 2. A desired physical environment, characterized by beauty, cleanliness, quiet, stable natural systems, and uniqueness, that enhances the mental and physical well being of the people. | | | |



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| <p>3. Physical, social, and economic well-being, for individuals and families in Hawaii, that nourishes a sense of community responsibility, of caring, and of participation in community life.</p> | | | |
| <p><i>Analysis:</i> The proposed MRTP Master Plan achieves the above-referenced goals by 1) creating a more conducive environment for the diversification of the State’s economy; 2) creating employment opportunities and housing for Maui residents, thereby providing greater opportunity for self-reliance and self-determination. Moreover, the project will demonstrate the benefits of a “New Urban” community, which among several benefits, includes the more efficient use of the County’s infrastructure and public facilities and the creation of a more cohesive, livable and environmentally sustainable community.</p> | | | |
| <p><u>Chapter 226-5, HRS, Objective and Policies for Population</u></p> | | | |
| <p>Objective: It shall be the objective in planning for the state’s population to guide population growth to be consistent with the achievement of physical, economic and social objectives contained in this chapter.</p> | | | |
| <p><i>Policies:</i></p> | <p>S</p> | <p>N/S</p> | <p>N/A</p> |
| <p>(1) Manage population growth statewide in a manner that provides increased opportunities for Hawaii's people to pursue their physical, social, and economic aspirations while recognizing the unique needs of each county.</p> | <p>✓</p> | | |
| <p>(2) Encourage an increase in economic activities and employment opportunities on the neighbor islands consistent with community needs and desires.</p> | <p>✓</p> | | |
| <p>(3) Promote increased opportunities for Hawaii's people to pursue their socio-economic aspirations throughout the islands.</p> | <p>✓</p> | | |
| <p>(4) Encourage research activities and public awareness programs to foster an understanding of Hawaii's limited capacity to accommodate population needs and to address concerns resulting from an increase in Hawaii's population.</p> | | | <p>✓</p> |
| <p>(5) Encourage federal actions and coordination among major governmental agencies to promote a more balanced distribution of immigrants among the states, provided that such actions do not prevent the reunion of immediate family members.</p> | | | <p>✓</p> |
| <p>(6) Pursue an increase in federal assistance for states with a greater proportion of foreign immigrants relative to their state's population.</p> | | | <p>✓</p> |



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| (7) Plan the development and availability of land and water resources in a coordinated manner so as to provide for the desired levels of growth in each geographic area. [L 1978, c 100, pt of §2; am L 1986, c 276, §4; am L 1988, c 70, §3; am L 1993, c 213, §3] | ✓ | | |
| <p><u>Analysis:</u> The MRTP was established in the early 1980’s to diversify the State’s economy by encouraging research and technology based businesses to locate to Maui. It has been over 25 years since the underlying zoning documents for the Park have been updated. The updated Master Plan responds to the most current trends in the development of innovation centers nationwide. The Master Plan Update will strengthen Maui’s economy by making the MRTP a more attractive location for investment in knowledge-based industries. These industries will create high paying jobs for residents, which will in turn have a positive impact on the rest of the Maui economy. The result will be an increase in economic activities and employment opportunities on the neighbor islands consistent with community needs and desires, which will promote increased opportunities for Hawaii.</p> | | | |
| <p><u>Chapter 226-6, HRS, Objectives and Policies for the Economy - in General</u></p> | | | |
| <p>Objectives: Planning for the State's economy in general shall be directed toward achievement of the following objectives:</p> | | | |
| Objectives: | S | N/S | N/A |
| (1) Increased and diversified employment opportunities to achieve full employment, increased income and job choice, and improved living standards for Hawaii's people, while at the same time stimulating the development and expansion of economic activities capitalizing on defense, dual-use, and science and technology assets, particularly on the neighbor islands where employment opportunities may be limited. | ✓ | | |
| (2) A steadily growing and diversified economic base that is not overly dependent on a few industries, and includes the development and expansion of industries on the neighbor islands. | ✓ | | |
| Policies: | S | N/S | N/A |
| (1) Expand Hawaii's national and international marketing, communication, and organizational ties, to increase the State's capacity to adjust to and capitalize upon economic changes and opportunities occurring outside the State. | ✓ | | |
| (2) Promote Hawaii as an attractive market for environmentally and socially sound investment activities that benefit Hawaii's people. | ✓ | | |



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| (3) Seek broader outlets for new or expanded Hawaii business investments. | | | ✓ |
| (4) Expand existing markets and penetrate new markets for Hawaii's products and services. | | | ✓ |
| (5) Assure that the basic economic needs of Hawaii's people are maintained in the event of disruptions in overseas transportation. | | | ✓ |
| (6) Strive to achieve a level of construction activity responsive to, and consistent with, state growth objectives. | ✓ | | |
| (7) Encourage the formation of cooperatives and other favorable marketing arrangements at the local or regional level to assist Hawaii's small scale producers, manufacturers, and distributors. | | | ✓ |
| (8) Encourage labor-intensive activities that are economically satisfying and which offer opportunities for upward mobility. | | | ✓ |
| (9) Foster greater cooperation and coordination between the government and private sectors in developing Hawaii's employment and economic growth opportunities. | | | ✓ |
| (10) Stimulate the development and expansion of economic activities which will benefit areas with substantial or expected employment problems. | ✓ | | |
| (11) Maintain acceptable working conditions and standards for Hawaii's workers. | ✓ | | |
| (12) Provide equal employment opportunities for all segments of Hawaii's population through affirmative action and nondiscrimination measures. | ✓ | | |
| (13) Stimulate the development and expansion of economic activities capitalizing on defense, dual-use, and science and technology assets, particularly on the neighbor islands where employment opportunities may be limited. | ✓ | | |
| (14) Encourage businesses that have favorable financial multiplier effects within Hawaii's economy, particularly with respect to emerging industries in science and technology. | ✓ | | |
| (15) Promote and protect intangible resources in Hawaii, such as scenic beauty and the aloha spirit, which are vital to a healthy economy. | ✓ | | |
| (16) Increase effective communication between the educational community and the private sector to develop relevant curricula and training | ✓ | | |



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| programs to meet future employment needs in general, and requirements of new, potential growth industries in particular. | | | |
| (17) Foster a business climate in Hawaii--including attitudes, tax and regulatory policies, and financial and technical assistance programs--that is conducive to the expansion of existing enterprises and the creation and attraction of new business and industry. [L 1978, c 100, pt of §2; am L 1986, c 276, §5; am L 1988, c 70, §4; am L 1993, c 213, §4; am L 2009, c 167, §2] | ✓ | | |
| <p><u>Analysis:</u> As discussed in Section III.B.3 (Economy) the MRTP is projected to generate approximately \$1.39 billion of direct capital investment into the Maui economy and will provide an estimated 63,507 “worker years” of employment and \$2.7 billion in total wages over a 19 year period. This will result in expenditures that will have a positive direct, indirect and induced impact on the County of Maui economy. During the operations phase, the MRTP will significantly increase the level of capital investment in the region which will create employment opportunities and create an economic stimulus for the region. The MRTP will provide direct employment opportunities for Maui residents and contribute to the diversification and growth of the Island’s and State’s economies. After “stabilization” is estimated that the Park will support 5,878 jobs with an annual payroll of about \$217 million.</p> | | | |
| <p><u>Chapter 226-7 Objectives and policies for the economy-agriculture.</u></p> | | | |
| <p><u>Objectives;</u> Planning for the State's economy with regard to agriculture shall be directed towards achievement of the following objectives:</p> | | | |
| Objectives: | S | N/S | N/A |
| (1) Viability of Hawaii's sugar and pineapple industries. | | | ✓ |
| (2) Growth and development of diversified agriculture throughout the State. | | | ✓ |
| (3) An agriculture industry that continues to constitute a dynamic and essential component of Hawaii's strategic, economic, and social well-being. | | | ✓ |
| Policies: | | | |
| (1) Establish a clear direction for Hawaii's agriculture through stakeholder commitment and advocacy. | | | ✓ |
| (2) Encourage agriculture by making best use of natural resources. | | | ✓ |



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| (3) Provide the governor and the legislature with information and options needed for prudent decision making for the development of agriculture. | | | ✓ |
| (4) Establish strong relationships between the agricultural and visitor industries for mutual marketing benefits. | | | ✓ |
| (5) Foster increased public awareness and understanding of the contributions and benefits of agriculture as a major sector of Hawaii's economy. | | | ✓ |
| (6) Seek the enactment and retention of federal and state legislation that benefits Hawaii's agricultural industries. | | | ✓ |
| (7) Strengthen diversified agriculture by developing an effective promotion, marketing, and distribution system between Hawaii's producers and consumer markets locally, on the continental United States, and internationally. | | | ✓ |
| (8) Support research and development activities that strengthen economic productivity in agriculture, stimulate greater efficiency, and enhance the development of new products and agricultural by-products. | ✓ | | |
| (9) Enhance agricultural growth by providing public incentives and encouraging private initiatives. | | | ✓ |
| (10) Assure the availability of agriculturally suitable lands with adequate water to accommodate present and future needs. | | | ✓ |
| (11) Increase the attractiveness and opportunities for an agricultural education and livelihood. | | | ✓ |
| (12) Expand Hawaii's agricultural base by promoting growth and development of flowers, tropical fruits and plants, livestock, feed grains, forestry, food crops, aquaculture, and other potential enterprises. | | | ✓ |



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| (13) Promote economically competitive activities that increase Hawaii's agricultural self-sufficiency. | | | ✓ |
| (14) Promote and assist in the establishment of sound financial programs for diversified agriculture. | | | ✓ |
| (15) Institute and support programs and activities to assist the entry of displaced agricultural workers into alternative agricultural or other employment. | | | ✓ |
| (16) Facilitate the transition of agricultural lands in economically non-feasible agricultural production to economically viable agricultural uses. [L 1978, c 100, pt of §2; am L 1986, c 276, §6; am L 1993, c 25, §2; am L 2009, c 167, §3] | | | ✓ |
| <p><i>Analysis:</i> As discussed in Section III.A.10 (Agricultural Resources) the development of the MRTTP will not reduce the inventory of agriculturally significant lands. The property is rated "E" with some portions "Unclassified" under the LSB classification system. The property is "Unclassified" under the ALISH classification system, indicating that the property is not agriculturally significant. However, the subject property and its facilities can be used for research and development activities that lead to a more sustainable and efficient agricultural industry.</p> | | | |
| <p><u>Chapter 226-8 Objective and policies for the economy-visitor industry.</u></p> | | | |
| <p><u>Objectives:</u> Planning for the State's economy with regard to the visitor industry shall be directed towards the achievement of the objective of a visitor industry that constitutes a major component of steady growth for Hawaii's economy.</p> | | | |
| <p><u>Policies:</u></p> | | | |
| (1) Support and assist in the promotion of Hawaii's visitor attractions and facilities. | | | ✓ |
| (2) Ensure that visitor industry activities are in keeping with the social, economic, and physical needs and aspirations of Hawaii's people. | | | ✓ |
| (3) Improve the quality of existing visitor destination areas by utilizing Hawaii's strengths in science and technology. | | | ✓ |



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| (4) Encourage cooperation and coordination between the government and private sectors in developing and maintaining well-designed, adequately serviced visitor industry and related developments which are sensitive to neighboring communities and activities. | | | ✓ |
| (5) Develop the industry in a manner that will continue to provide new job opportunities and steady employment for Hawaii's people. | | | ✓ |
| (6) Provide opportunities for Hawaii's people to obtain job training and education that will allow for upward mobility within the visitor industry. | | | ✓ |
| (7) Foster a recognition of the contribution of the visitor industry to Hawaii's economy and the need to perpetuate the aloha spirit. | | | ✓ |
| (8) Foster an understanding by visitors of the aloha spirit and of the unique and sensitive character of Hawaii's cultures and values. [L 1978, c 100, pt of §2; am L 1986, c 276, §7; am L 1988, c 70, §5; am L 2009, c 167, §4] | | | ✓ |
| <i>Analysis:</i> The MRTP is not targeting the visitor industry; however a small business hotel is a proposed use in the mixed village portion of the Master Plan Update. The hotel is intended for short term occupancy for visitors conducting business within the Park. Additionally, transient vacation rentals, timeshares and bed and breakfast operations will be prohibited; therefore these objectives and policies are not applicable. | | | |
| <u>Chapter 226-9 Objective and policies for the economy-federal expenditures.</u> | | | |
| <u>Objective:</u> Planning for the State's economy with regard to federal expenditures shall be directed towards achievement of the objective of a stable federal investment base as an integral component of Hawaii's economy. | | | |
| <u>Policies:</u> | | | |
| (1) Encourage the sustained flow of federal expenditures in Hawaii that generates long-term government civilian employment; | ✓ | | |



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| (2) Promote Hawaii's supportive role in national defense, in a manner consistent with Hawaii's social, environmental, and cultural goals by building upon dual-use and defense applications to develop thriving ocean engineering, aerospace research and development, and related dual-use technology sectors in Hawaii's economy; | ✓ | | |
| (3) Promote the development of federally supported activities in Hawaii that respect statewide economic concerns, are sensitive to community needs, and minimize adverse impacts on Hawaii's environment; | | | ✓ |
| (4) Increase opportunities for entry and advancement of Hawaii's people into federal government service; | | | ✓ |
| (5) Promote federal use of local commodities, services, and facilities available in Hawaii; | | | ✓ |
| (6) Strengthen federal-state-county communication and coordination in all federal activities that affect Hawaii; and | | | ✓ |
| (7) Pursue the return of federally controlled lands in Hawaii that are not required for either the defense of the nation or for other purposes of national importance, and promote the mutually beneficial exchanges of land between federal agencies, the State, and the counties. [L 1978, c 100, pt of §2; am L 1986, c 276, §8; am L 2006, c 65, §3; am L 2009, c 167, §5] | | | ✓ |
| <u>Analysis:</u> The MRTP is currently home to the U.S. Air Force and has several defense related businesses that pursue research and development and provide various high-tech related services to the Department of Defense. The implementation of the Master Plan Update will promote further government uses. These uses will not only promote Hawaii's support of national defense, but will also encourage additional federal expenditures in the State. | | | |
| <u>Chapter 226-10 Objective and policies for the economy-potential growth activities.</u> | | | |
| <u>Objective:</u> Planning for the State's economy with regard to potential growth activities shall be directed towards achievement of the objective of development and expansion of potential growth activities that serve to increase and diversify Hawaii's economic base. | | | |
| <u>Policies:</u> | | | |
| (1) Facilitate investment and employment growth in economic activities that have the potential to expand and diversify Hawaii's economy, including but not limited to diversified agriculture, aquaculture, renew- | ✓ | | |



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| <p>able energy development, creative media, and science and technology-based sectors;</p> <p>(2) Expand Hawaii's capacity to attract and service international programs and activities that generate employment for Hawaii's people;</p> | | | |
| <p>(3) Enhance and promote Hawaii's role as a center for international relations, trade, finance, services, technology, education, culture, and the arts;</p> | ✓ | | |
| <p>(4) Accelerate research and development of new energy-related industries based on wind, solar, ocean, and underground resources and solid waste;</p> | ✓ | | |
| <p>(5) Promote Hawaii's geographic, environmental, social, and technological advantages to attract new economic activities into the State;</p> | ✓ | | |
| <p>(6) Provide public incentives and encourage private initiative to attract new industries that best support Hawaii's social, economic, physical, and environmental objectives;</p> | ✓ | | |
| <p>(7) Increase research and the development of ocean-related economic activities such as mining, food production, and scientific research;</p> | ✓ | | |
| <p>(8) Develop, promote, and support research and educational and training programs that will enhance Hawaii's ability to attract and develop economic activities of benefit to Hawaii;</p> | ✓ | | |
| <p>(9) Foster a broader public recognition and understanding of the potential benefits of new, growth-oriented industry in Hawaii;</p> | ✓ | | |
| <p>(10) Encourage the development and implementation of joint federal and state initiatives to attract federal programs and projects that will support Hawaii's social, economic, physical, and environmental objectives;</p> | ✓ | | |



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|--|----------|--|--|
| <p>(11) Increase research and development of businesses and services in the telecommunications and information industries; and</p> | <p>✓</p> | | |
| <p>(12) Foster the research and development of non-fossil fuel and energy efficient modes of transportation. [L 1978, c 100, pt of §2; am L 1986, c 276, §9; am L 1988, c 70, §6; am L Sp 1988, c 1, §5; am L 2009, c 156, §2 and c 167, §6]</p> | <p>✓</p> | | |
| <p><u>Analysis:</u> The MRTP has been an existing technology based business park since the 1980's and currently has 25 businesses employing over 400 employees in a variety of high-technology and supporting businesses. However, the pace of the Park's development has been slower than desired due to a number of factors. The purpose of the Master Plan Update is to remove barriers that have slowed the optimal build-out of the site. The MRTP Master Plan Update and amendment of the zoning ordinance will broaden the types of uses permitted in the Park from a narrow high-technology focus to a more encompassing knowledge-based industry focus. In addition, supportive accessory uses will be allowed in the Park, and development standards will be modified to allow for smaller lot sizes and greater flexibility to attract a broader range of desirable businesses with a diversified offering. New Urbanism planning techniques and urban design strategies will make the MRTP a more vibrant and attractive environment for businesses to locate and grow their operations. Current best practices in planning and in development of employment centers utilize this approach. The Association of University Research Parks supports this approach in the development of "communities of innovation".</p> <p>The MRTP originated from a public/private partnership, and the Park will continue to encourage such partnership initiatives to attract new industries. The MRTP is currently home to a diverse range of companies and government projects working in such areas as space surveillance, communications, scientific research, advanced materials development, optics, and photonics. The MRTP will continue to attract new businesses and industries including, but not limited to, renewable energy-related industries, research and development, telecommunications and information industries and government programs. The MRTP is strongly supportive of the State's energy efficiency and renewable energy goal as evidenced by the ongoing solar energy demonstration taking place at the Park.</p> | | | |
| <p><u>Chapter 226-10.5 Objectives and policies for the economy-information industry.</u></p> | | | |
| <p><u>Objective:</u> Planning for the State's economy with regard to telecommunications and information technology shall be directed toward positioning Hawaii as a leader in broadband communications and applications in the Pacific Region.</p> | | | |



| <u>Policies:</u> | <u>S</u> | <u>N/S</u> | <u>N/A</u> |
|---|-----------------|-------------------|-------------------|
| (1) Encourage the continued development and expansion of the telecommunications infrastructure serving Hawaii to accommodate future growth in the information industry; | ✓ | | |
| (2) Facilitate the development of new business and service ventures in the information industry which will provide employment opportunities for the people of Hawaii; | ✓ | | |
| (3) Encourage greater cooperation between the public and private sectors in developing and maintaining a well- designed information industry; | ✓ | | |
| (4) Ensure that the development of new businesses and services in the industry are in keeping with the social, economic, and physical needs and aspirations of Hawaii's people; | ✓ | | |
| (5) Provide opportunities for Hawaii's people to obtain job training and education that will allow for upward mobility within the information industry; | | | ✓ |
| (6) Foster a recognition of the contribution of the information industry to Hawaii's economy; and | ✓ | | |
| (7) Assist in the promotion of Hawaii as a broker, creator, and processor of information in the Pacific. [L Sp 1988, c 1, §3; am L 2009, c 167, §7] | ✓ | | |
| <u>Analysis:</u> The MRTP has been designated as the location to provide a place for developing non-polluting research and technology based businesses. Information technology would complement the existing and desired future use of the property. | | | |
| <u>Chapter 226-11, HRS, Objectives and Policies for the Physical Environment - Land Based, Shoreline, and Marine Resources</u> | | | |
| <u>Objectives:</u> Planning for the State's economy with regard to telecommunications and information technology shall be directed toward positioning Hawaii as a leader in broadband communications and applications in the Pacific Region. The MRTP is, and will continue to be, an important component of the State's telecommunication and information industry. The Master Plan Update will facilitate the development of new businesses and service ventures in the information industry which will provide employment opportunities for Maui residents. The Park also promotes cooperation between the public and private sector in advancing the information industry. | | | |



| | <u>S</u> | <u>N/S</u> | <u>N/A</u> |
|--|----------|------------|------------|
| (1) Prudent use of Hawaii's land-based, shoreline, and marine resources. | ✓ | | |
| (2) Effective protection of Hawaii's unique and fragile environmental resources. | ✓ | | |
| <u>Policies:</u> | | | |
| (1) Exercise an overall conservation ethic in the use of Hawaii's natural resources. | ✓ | | |
| (2) Ensure compatibility between land-based and water-based activities and natural resources and ecological systems. | ✓ | | |
| (3) Take into account the physical attributes of areas when planning and designing activities and facilities. | ✓ | | |
| (4) Manage natural resources and environs to encourage their beneficial and multiple use without generating costly or irreparable environmental damage. | ✓ | | |
| (5) Consider multiple uses in watershed areas, provided such uses do not detrimentally affect water quality and recharge functions. | | | ✓ |
| (6) Encourage the protection of rare or endangered plant and animal species and habitats native to Hawaii. | ✓ | | |
| (7) Provide public incentives that encourage private actions to protect significant natural resources from degradation or unnecessary depletion. | | | ✓ |
| (8) Pursue compatible relationships among activities, facilities, and natural resources. | ✓ | | |
| (9) Promote increased accessibility and prudent use of inland and shoreline areas for public recreational, educational, and scientific purposes. [L 1978, c 100, pt of §2; am L 1986, c 276, §10] | ✓ | | |
| <p><u>Analysis:</u> The MRTP is not located within the State's Special Management Area and no listed or endangered species of flora and fauna were identified on the property. During build-out and during the operation phase best management practices will be implemented to mitigate non-point source pollution to Maui's coastal resources as well as to mitigate fugitive dust impacts. In addition, through the EIS and entitlement application processes mitigation measures will be identified to help address any environmental impacts that may arise from the project.</p> <p>From a site planning perspective, the Master Plan Update design layout carefully considered the natural topography of the site and incorporated unique natural areas into parks and open spaces</p> | | | |



throughout the MRTP. Proposed buildings were incorporated into the natural topography of the property and building layout is oriented to preserve view planes towards the Pacific Ocean.

Chapter 226-12, HRS, Objective and Policies for the Physical Environment - Scenic, Natural Beauty, and Historic Resources

Objective: Planning for the State's physical environment shall be directed towards achievement of the objective of enhancement of Hawaii's scenic assets, natural beauty, and multi-cultural/historical resources.

| <u>Policies:</u> | <u>S</u> | <u>N/S</u> | <u>N/A</u> |
|--|-----------------|-------------------|-------------------|
| (1) Promote the preservation and restoration of significant natural and historic resources. | ✓ | | |
| (2) Provide incentives to maintain and enhance historic, cultural, and scenic amenities. | ✓ | | |
| (3) Promote the preservation of views and vistas to enhance the visual and aesthetic enjoyment of mountains, ocean, scenic landscapes, and other natural features. | ✓ | | |
| (4) Protect those special areas, structures, and elements that are an integral and functional part of Hawaii's ethnic and cultural heritage. | ✓ | | |
| (5) Encourage the design of developments and activities that complement the natural beauty of the islands. [L 1978, c 100, pt of §2; am L 1986, c 276, §11] | ✓ | | |

Analysis: As discussed in Section III.A. 8 (Historical and Archaeological Resources) the Project's AIS yielded a very limited number of sites which is consistent with the Barren Zone model for pre-contact settlement in the Kihei area; therefore no further archaeological work is recommended for this project area.

As discussed in Section III.B.4 (Cultural Resources) the Project's CIA reported that there were no visible cultural resources, i.e. medicinal plants, shoreline resources, religious sites, or archeological resources observed on the property. From a cultural practices and beliefs perspective, the subject property bears no apparent signs of cultural practices or gatherings currently taking place. The oral history interviews did not reveal any known gathering places on the subject property or any access



concerns as a result of the proposed Project. Therefore it can be concluded that development of the site will not impact cultural resources on the property or within its immediate vicinity.

As discussed in Section III.A.9 (Visual Resources) the MRTP will not impinge upon any significant public view corridors and the MRTP will not have significant impacts on views toward the ocean or Haleakala. The Design Guidelines of the Master Plan Update will establish a form based code that will create building forms that are appropriate with the surrounding land uses. The Design Guidelines will maintain views towards the summit of Haleakala and the Pacific Ocean. Open space is integrated throughout the Project and, together with the proposed street layout, creates and frames view corridors throughout the Park to the Pacific Ocean and to Haleakala. The Project will complement the high quality architectural character of the existing MRTP as well as other developed properties in the area.

Chapter 226-13, Hawaii Revised Statutes, Objectives and Policies for the Physical Environment - Land, Air, and Water Quality

| <u>Objectives:</u> | S | N/S | N/A |
|---|----------|------------|------------|
| (1) Maintenance and pursuit of improved quality in Hawaii's land, air, and water resources. | ✓ | | |
| (2) Greater public awareness and appreciation of Hawaii's environmental resources. | ✓ | | |
| <u>Policies:</u> | S | N/S | N/A |
| (1) Foster educational activities that promote a better understanding of Hawaii's limited environmental resources. | ✓ | | |
| (2) Promote the proper management of Hawaii's land and water resources. | ✓ | | |
| (3) Promote effective measures to achieve desired quality in Hawaii's surface, ground, and coastal waters. | ✓ | | |
| (4) Encourage actions to maintain or improve aural and air quality levels to enhance the health and well-being of Hawaii's people. | ✓ | | |
| (5) Reduce the threat to life and property from erosion, flooding, tsunamis, hurricanes, earthquakes, volcanic eruptions, and other natural or man-induced hazards and disasters. | ✓ | | |
| (6) Encourage design and construction practices that enhance the physical qualities of Hawaii's communities. | ✓ | | |



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| (7) Encourage urban developments in close proximity to existing services and facilities. | ✓ | | |
| (8) Foster recognition of the importance and value of the land, air, and water resources to Hawaii's people, their cultures and visitors. [L 1978, c 100, pt of §2; am L 1986, c 276, §12] | ✓ | | |
| <p><u>Analysis:</u> The MRTP is not located within the State's Special Management Area and no listed or endangered species of flora and fauna were identified on the property. During build-out and during the operation phase best management practices will be implemented to mitigate non-point source pollution to Maui's coastal resources as well as to mitigate fugitive dust impacts. In addition, through the EIS and entitlement application processes mitigation measures will be identified to help address any environmental impacts that may arise from the project.</p> <p>For a site planning perspective, the master plan design layout carefully considered the natural topography of the site and incorporated unique natural areas into parks and open spaces throughout the MRTP. Proposed buildings were incorporated into the natural topography of the property and building layout is oriented to preserve view planes towards the Pacific Ocean.</p> <p>As discussed in Section III.A.6 (Air Quality) the MRTP may create short term impacts on air quality directly and indirectly during construction, however mitigation measures will be implemented. It is anticipated that the MRTP will not violate Federal or State air quality standards.</p> <p>As discussed in Section III.A.4 (Natural Hazards) the development of the MRTP will not increase the possibility of natural hazards such as flooding, tsunami inundation, hurricanes and earthquakes. The MRTP will be constructed in compliance with County, State and Federal standards.</p> <p>The New Urbanism concept is a globally successful design practice that the MRTP will utilize. The design will enhance the physical quality of the property by providing housing and development surrounding an existing employment base and related infrastructure.</p> | | | |
| <p><u>Chapter 226-14 Objective and policies for facility systems-in general.</u></p> | | | |
| <p><u>Objective:</u> Planning for the State's facility systems in general shall be directed towards achievement of the objective of water, transportation, waste disposal, and energy and telecommunication systems that support statewide social, economic, and physical objectives.</p> | | | |
| <p><u>Policies:</u></p> | | | |
| (1) Accommodate the needs of Hawaii's people through coordination of facility systems and capital improvement priorities in consonance with | S | N/S | N/A |



| | | | |
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| state and county plans. | | | |
| (2) Encourage flexibility in the design and development of facility systems to promote prudent use of resources and accommodate changing public demands and priorities. | | | ✓ |
| (3) Ensure that required facility systems can be supported within resource capacities and at reasonable cost to the user. | | | ✓ |
| (4) Pursue alternative methods of financing programs and projects and cost-saving techniques in the planning, construction, and maintenance of facility systems. [L 1978, c 100, pt of §2; am L 1986, c 276, §13] | | | ✓ |
| <u>Analysis:</u> the MRTP does not involve planning for the State's facility systems; therefore these objectives and policies are not applicable. | | | |
| <u>Chapter 226-15, Hawaii Revised Statutes, Objectives and Policies for Facility Systems - Solid and Liquid Waste.</u> | | | |
| <u>Objectives:</u> Planning for the State's facility systems in general shall be directed towards achievement of the objective of water, transportation, waste disposal, and energy and telecommunication systems that support statewide social, economic, and physical objectives. | | | |
| <u>Objectives:</u> | <u>S</u> | <u>N/S</u> | <u>N/A</u> |
| (1) Maintenance of basic public health and sanitation standards relating to treatment and disposal of solid and liquid wastes. | ✓ | | |
| (2) Provision of adequate sewerage facilities for physical and economic activities that alleviate problems in housing, employment, mobility, and other areas. | ✓ | | |
| <u>Policies:</u> | <u>S</u> | <u>N/S</u> | <u>N/A</u> |
| (1) Encourage the adequate development of sewerage facilities that complement planned growth. | ✓ | | |
| (2) Promote re-use and recycling to reduce solid and liquid wastes and employ a conservation ethic. | ✓ | | |
| (3) Promote research to develop more efficient and economical treatment and disposal of solid and liquid wastes. [L 1978, c 100, pt of §2; am L 1986, c 276, §14] | ✓ | | |
| <u>Analysis:</u> As discussed in Section III.D.5 (Wastewater), the MRTP is connected to the Kihei Wastewater Reclamation Facility (WWRF) which provides treated water to the MRTP for use as irrigation wa- | | | |



ter. The Elleair Golf Course and Monsanto Seed farm also utilize the treated water for irrigation. The WWRF was designed to accommodate future population growth in South Maui and has a surplus of treated R-1 effluent. The additional development proposed as part of the MRTP Master Plan Update would utilize available recycled water as well.

As discussed in Section III.C.5 (Solid Waste) the MRTP will develop strategies for reducing solid waste delivered to the land fill by providing options for recycling and promoting recycling practices among residents and businesses.

Chapter 226-16, Hawaii Revised Statutes, Objectives and Policies for Facility Systems - Water.

Objective: Planning for the State's facility systems in general shall be directed towards achievement of the objective of water, transportation, waste disposal, and energy and telecommunication systems that support statewide social, economic, and physical objectives.

| <u>Policies:</u> | S | N/S | N/A |
|---|----------|------------|------------|
| (1) Coordinate development of land use activities with existing and potential water supply. | ✓ | | |
| (2) Support research and development of alternative methods to meet future water requirements well in advance of anticipated needs. | ✓ | | |
| (3) Reclaim and encourage the productive use of runoff water and wastewater discharges. | ✓ | | |
| (4) Assist in improving the quality, efficiency, service, and storage capabilities of water systems for domestic and agricultural use. | ✓ | | |
| (5) Support water supply services to areas experiencing critical water problems. | ✓ | | |
| (6) Promote water conservation programs and practices in government, private industry, and the general public to help ensure adequate water to meet long-term needs. [L 1978, c 100, pt of §2; am L 1986, c 276, §15] | ✓ | | |

Analysis: As discussed in Section III.D.4 (Water) the MRTP's preferred source of ~~potable~~ drinking water is water supplied by the County Department of Water Supply (DWS) and the preferred source of ~~non-potable~~ drinking water is reclaimed water from the KWWRF. However, current County water policy prohibits the DWS from allocating drinking water to a future subdivision, and yet a dedicated source of drinking water is required for subdivision approval. In response, the Maui R&T Partners will, if necessary, develop and treat on-site brackish well water to meet its ~~potable~~ drinking water demand and any ~~non-potable~~ drinking water demand that cannot be supplied by the KWWRF.



In addition to developing its own on-site drinking water source, Maui R&T Partners is committed to water conservation strategies to reduce consumption, conserve resources and minimize water demands, and it will implement water conservation recommendations of the County of Maui Department of Water Supply.

Chapter 226-17 Objectives and policies for facility systems-transportation.

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

| <u>Objectives:</u> | <u>S</u> | <u>N/S</u> | <u>N/A</u> |
|--|-----------------|-------------------|-------------------|
| (1) An integrated multi-modal transportation system that services statewide needs and promotes the efficient, economical, safe, and convenient movement of people and goods. | | | ✓ |
| (2) A statewide transportation system that is consistent with and will accommodate planned growth objectives throughout the State. | | | ✓ |
| <u>Policies:</u> | | | |
| (1) Design, program, and develop a multi-modal system in conformance with desired growth and physical development as stated in this chapter; | | | ✓ |
| (2) Coordinate state, county, federal, and private transportation activities and programs toward the achievement of statewide objectives; | | | ✓ |
| (3) Encourage a reasonable distribution of financial responsibilities for transportation among participating governmental and private parties; | ✓ | | |
| (4) Provide for improved accessibility to shipping, docking, and storage facilities; | | | ✓ |
| (5) Promote a reasonable level and variety of mass transportation services that adequately meet statewide and community needs; | ✓ | | |
| (6) Encourage transportation systems that serve to accommodate present and future development needs of communities; | ✓ | | |
| (7) Encourage a variety of carriers to offer increased opportunities and advantages to interisland movement of people and goods; | | | ✓ |
| (8) Increase the capacities of airport and harbor systems and support facilities to effectively accommodate transshipment and storage needs; | | | ✓ |
| (9) Encourage the development of transportation systems and programs which would assist statewide economic growth and diversifica- | | | ✓ |



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| tion; | | | |
| (10) Encourage the design and development of transportation systems sensitive to the needs of affected communities and the quality of Hawaii's natural environment; | | | ✓ |
| (11) Encourage safe and convenient use of low-cost, energy-efficient, non-polluting means of transportation; | ✓ | | |
| (12) Coordinate intergovernmental land use and transportation planning activities to ensure the timely delivery of supporting transportation infrastructure in order to accommodate planned growth objectives; and | | | ✓ |
| (13) Encourage diversification of transportation modes and infrastructure to promote alternate fuels and energy efficiency. [L 1978, c 100, pt of §2; am L 1986, c 276, §16; am L 1993, c 149, §1; am L 1994, c 96, §3] | ✓ | | |
| <p><u>Analysis:</u> As discussed in Section II.E.3 and 4 of the DEIS, the Master Plan Update will establish a settlement pattern that is significantly more compact and mixed-use in character and is thereby less significantly less dependent upon motorized transportation as compared to the existing Plan. The Updated Plan also makes a considerable investment into a unified system of pedestrian and bicycle infrastructure that will connect the residential, mixed-use and employment areas together into a unified whole.</p> <p>In addition, The MRTP transportation demand management strategies support methods such as ride-sharing, bicycle and pedestrian use, off-peak commuting and other measures as discussed in the TIAR in Appendix H <u>G</u>.</p> | | | |
| <p><u>Chapter 226-18, Hawaii Revised Statutes, Objectives and Policies for Facility Systems - Energy.</u></p> | | | |
| <p><u>Objectives:</u> Planning for the State's facility systems with regard to energy shall be directed toward the achievement of the following objectives, giving due consideration to all:</p> | | | |
| <u>Objectives:</u> | <u>S</u> | <u>N/S</u> | <u>N/A</u> |
| (1) Dependable, efficient, and economical statewide energy systems capable of supporting the needs of the people; | | | ✓ |
| (2) Increased energy self-sufficiency where the ratio of indigenous to imported energy use is increased; | ✓ | | |
| (3) Greater energy security and diversification in the face of threats to Hawaii's energy supplies and systems; and | | | ✓ |



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| (4) Reduction, avoidance, or sequestration of greenhouse gas emissions from energy supply and use. | ✓ | | |
| <u>Policies:</u> | S | N/S | N/A |
| (1) Support research and development as well as promote the use of renewable energy sources; | ✓ | | |
| (2) Ensure that the combination of energy supplies and energy-saving systems is sufficient to support the demands of growth; | | | ✓ |
| (3) Base decisions of least-cost supply-side and demand-side energy resource options on a comparison of their total costs and benefits when a least-cost is determined by a reasonably comprehensive, quantitative, and qualitative accounting of their long-term, direct and indirect economic, environmental, social, cultural, and public health costs and benefits; | | | ✓ |
| (4) Promote all cost-effective conservation of power and fuel supplies through measures, including: | ✓ | | |
| (A) Development of cost-effective demand-side management programs; | | | ✓ |
| (B) Education; and | | | ✓ |
| (C) Adoption of energy-efficient practices and technologies; | ✓ | | |
| (5) Ensure, to the extent that new supply-side resources are needed, that the development or expansion of energy systems uses the least-cost energy supply option and maximizes efficient technologies; | | | ✓ |
| (6) Support research, development, demonstration, and use of energy efficiency, load management, and other demand-side management programs, practices, and technologies; | | | ✓ |
| (7) Promote alternate fuels and transportation energy efficiency; | ✓ | | |
| (8) Support actions that reduce, avoid, or sequester greenhouse gases in utility, transportation, and industrial sector applications; | ✓ | | |
| (9) Support actions that reduce, avoid, or sequester Hawaii's greenhouse gas emissions through agriculture and forestry initiatives; and | | | ✓ |
| (10) Provide priority handling and processing for all state and county permits required for renewable energy projects. [L 1978, c 100, pt of §2; | | | ✓ |



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| <p>am L 1986, c 276, §17; am L 1990, c 319, §2; am L 1994, c 96, §4; am L 2000, c 176, §1; am L 2007, c 205, §6; am L 2009, c 155, §17 and c 156, §3]</p> | | | |
| <p><i>Analysis:</i> As discussed in Section III.D.5 “Electrical” the MRTP will include energy-efficient design and conservation measures. Specifically, the design guidelines will encourage the use of energy efficient technology throughout the Park, specifically, in lighting, air-conditioning, and building materials. Solar hot water heaters will be utilized throughout the residential portion of the development and installation of Photovoltaic Energy Systems will be encouraged in all areas of the MRTP. Additionally, the MRTP currently has an ongoing solar energy demonstration project and actively promotes research and development in a variety of technologies.</p> <p>In addition, the MRTP is utilizing smart growth planning techniques that will help to reduce automobile trips. The design will help to minimize automobile trips by providing employment, goods, services and housing all within walking or biking distance of each other. The MRTP Master Plan Update has a unified pedestrian and bicycle system within the Park and connections to its existing and future surroundings. The pedestrian and bicycle system will provide future residents an alternative to driving for traveling within the MRTP.</p> | | | |
| <p><u>Chapter 226-18.5 Objectives and policies for facility systems-telecommunications.</u></p> | | | |
| <p><u>Objectives:</u> Planning for the State's telecommunications facility systems shall be directed towards the achievement of dependable, efficient, and economical statewide telecommunications systems capable of supporting the needs of the people.</p> <p>(b) To achieve the telecommunications objective, it shall be the policy of this State to ensure the provision of adequate, reasonably priced, and dependable telecommunications services to accommodate demand.</p> | | | |
| <p><u>Policies</u></p> | <p><u>S</u></p> | <p><u>N/S</u></p> | <p><u>N/A</u></p> |
| <p>(1) Facilitate research and development of telecommunication systems and resources;</p> | | | <p>✓</p> |
| <p>(2) Encourage public and private sector efforts to develop means for adequate, ongoing telecommunications planning;</p> | | | <p>✓</p> |
| <p>(3) Promote efficient management and use of existing telecommunications systems and services; and</p> | | | <p>✓</p> |
| <p>(4) Facilitate the development of education and training of telecommunications personnel. [L 1994, c 96, §2]</p> | | | <p>✓</p> |
| <p><i>Analysis:</i> the MRTP does not involve planning for the State’s telecommunication systems; therefore these objectives and policies are not applicable.</p> | | | |



| <u>Chapter 226-19 Objectives and policies for socio-cultural advancement-housing.</u> | | | |
|---|-----------------|-------------------|-------------------|
| <u>Objectives:</u> Planning for the State's socio-cultural advancement with regard to housing shall be directed toward the achievement of the following objectives: | | | |
| <u>Objectives:</u> | <u>S</u> | <u>N/S</u> | <u>N/A</u> |
| (1) Greater opportunities for Hawaii's people to secure reasonably priced, safe, sanitary, and livable homes, located in suitable environments that satisfactorily accommodate the needs and desires of families and individuals, through collaboration and cooperation between government and nonprofit and for-profit developers to ensure that more affordable housing is made available to very low-, low- and moderate-income segments of Hawaii's population. | ✓ | | |
| (2) The orderly development of residential areas sensitive to community needs and other land uses. | ✓ | | |
| (3) The development and provision of affordable rental housing by the State to meet the housing needs of Hawaii's people. | ✓ | | |
| <u>Policies:</u> | <u>S</u> | <u>N/S</u> | <u>N/A</u> |
| (1) Effectively accommodate the housing needs of Hawaii's people. | ✓ | | |
| (2) Stimulate and promote feasible approaches that increase housing choices for low-income, moderate-income, and gap-group households. | ✓ | | |
| (3) Increase homeownership and rental opportunities and choices in terms of quality, location, cost, densities, style, and size of housing. | ✓ | | |
| (4) Promote appropriate improvement, rehabilitation, and maintenance of existing housing units and residential areas. | | | ✓ |
| (5) Promote design and location of housing developments taking into account the physical setting, accessibility to public facilities and services, and other concerns of existing communities and surrounding areas. | ✓ | | |
| (6) Facilitate the use of available vacant, developable, and underutilized urban lands for housing. | ✓ | | |
| (7) Foster a variety of lifestyles traditional to Hawaii through the design and maintenance of neighborhoods that reflect the culture and values of the community. | ✓ | | |



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| <p>(8) Promote research and development of methods to reduce the cost of housing construction in Hawaii. [L 1978, c 100, pt of §2; am L 1986, c 276, §18; am L 1992, c 27, §2]</p> | <p>✓</p> | | |
| <p><u>Analysis:</u> As discussed in Section III.B.2 (Housing) the MRTP will offer a mix of single and multi-family housing types to address the diverse housing needs of Maui residents. The MRTP will include affordable housing units in compliance with Chapter 2.96, MCC Residential Workforce Housing Policy. Workforce homes will be subject to the requirements of Chapter 2.96, MCC to ensure that affordable homes are available for full time Maui residents.</p> | | | |
| <p><u>Chapter 226-20 Objectives and policies for socio-cultural advancement-health.</u></p> | | | |
| <p><u>Objectives:</u> Planning for the State's socio-cultural advancement with regard to health shall be directed towards achievement of the following objectives:</p> | | | |
| <p><u>Objectives:</u></p> | <p><u>S</u></p> | <p><u>N/S</u></p> | <p><u>N/A</u></p> |
| <p>(1) Fulfillment of basic individual health needs of the general public.</p> | | | <p>✓</p> |
| <p>(2) Maintenance of sanitary and environmentally healthful conditions in Hawaii's communities.</p> | | | <p>✓</p> |
| <p><u>Policies:</u></p> | <p><u>S</u></p> | <p><u>N/S</u></p> | <p><u>N/A</u></p> |
| <p>(1) Provide adequate and accessible services and facilities for prevention and treatment of physical and mental health problems, including substance abuse.</p> | | | <p>✓</p> |
| <p>(2) Encourage improved cooperation among public and private sectors in the provision of health care to accommodate the total health needs of individuals throughout the State.</p> | | | <p>✓</p> |
| <p>(3) Encourage public and private efforts to develop and promote statewide and local strategies to reduce health care and related insurance costs.</p> | | | <p>✓</p> |
| <p>(4) Foster an awareness of the need for personal health maintenance and preventive health care through education and other measures.</p> | | | <p>✓</p> |
| <p>(5) Provide programs, services, and activities that ensure environmentally healthful and sanitary conditions.</p> | | | <p>✓</p> |



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| <p>(6) Improve the State's capabilities in preventing contamination by pesticides and other potentially hazardous substances through increased coordination, education, monitoring, and enforcement. [L 1978, c 100, pt of §2; am L 1986, c 276, §19]</p> | | | ✓ |
| <p>Analysis: the MRTP does not plan for the State's socio-cultural advancement with regard to health; therefore these objectives and polices are not applicable.</p> | | | |
| <p>Chapter 226-21, Hawaii Revised Statutes, Objectives for Socio-Cultural Advancement - Education.</p> | | | |
| <p>Objective: Planning for the State's socio-cultural advancement with regard to education shall be directed towards achievement of the objective of the provision of a variety of educational opportunities to enable individuals to fulfill their needs, responsibilities, and aspirations.</p> | | | |
| <p>Policies:</p> | <p>S</p> | <p>N/S</p> | <p>N/A</p> |
| <p>(1) Support educational programs and activities that enhance personal development, physical fitness, recreation, and cultural pursuits of all groups.</p> | ✓ | | |
| <p>(2) Ensure the provision of adequate and accessible educational services and facilities that are designed to meet individual and community needs.</p> | ✓ | | |
| <p>(3) Provide appropriate educational opportunities for groups with special needs.</p> | | | ✓ |
| <p>(4) Promote educational programs which enhance understanding of Hawaii's cultural heritage.</p> | | | ✓ |
| <p>(5) Provide higher educational opportunities that enable Hawaii's people to adapt to changing employment demands.</p> | | | ✓ |
| <p>(6) Assist individuals, especially those experiencing critical employment problems or barriers, or undergoing employment transitions, by providing appropriate employment training programs and other related educational opportunities.</p> | | | ✓ |
| <p>(7) Promote programs and activities that facilitate the acquisition of basic skills, such as reading, writing, computing, listening, speaking, and reasoning.</p> | | | ✓ |
| <p>(8) Emphasize quality educational programs in Hawaii's institutions to promote academic excellence.</p> | | | ✓ |
| <p>(9) Support research programs and activities that enhance the education programs of the State. [L 1978, c 100, pt of §2; am L 1986, c 276,</p> | | | ✓ |



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| §20] | | | |
| <p><u>Analysis:</u> As discussed in Section III.C.4 (Schools) the Project site is being designed to accommodate a public and/or private elementary or intermediate school campus within the Village Center. In addition, in 2007, the Hawaii Legislature enacted Act 245 as Section 302A, HRS, “School Impact Fees”. Based upon this legislation, the Department of Education has enacted impact fees for residential developments that occur within indentified school impact districts. The Project is within the boundaries of the Central Maui Impact District and is within the Makawao Cost Area of that district. Projects within the district and cost area pay a construction fee and either a fee-in-lieu of land or a land donation, at the DOE’s discretion. At the appropriate time, the applicant will contact the DOE to enter into an impact fee agreement. Additionally, the MRTP site may be conducive to future higher education uses that desire an outer island location, within close proximity to one of the State’s leading technology clusters. The Master Plan Update identifies potential higher education uses and incorporates sufficient space for campus-type development near the employment/technology core.</p> | | | |
| <p><u>Chapter 226-22 Objective and policies for socio-cultural advancement-social services.</u></p> | | | |
| <p><u>Objective:</u> Planning for the State's socio-cultural advancement with regard to social services shall be directed towards the achievement of the objective of improved public and private social services and activities that enable individuals, families, and groups to become more self-reliant and confident to improve their well-being.</p> | | | |
| <p><u>Policies:</u></p> | <p>S</p> | <p>N/S</p> | <p>N/A</p> |
| <p>(1) Assist individuals, especially those in need of attaining a minimally adequate standard of living and those confronted by social and economic hardship conditions, through social services and activities within the State's fiscal capacities.</p> | | | <p>✓</p> |
| <p>(2) Promote coordination and integrative approaches among public and private agencies and programs to jointly address social problems that will enable individuals, families, and groups to deal effectively with social problems and to enhance their participation in society.</p> | | | <p>✓</p> |
| <p>(3) Facilitate the adjustment of new residents, especially recently arrived immigrants, into Hawaii's communities.</p> | | | <p>✓</p> |
| <p>(4) Promote alternatives to institutional care in the provision of long-term care for elder and disabled populations.</p> | | | <p>✓</p> |



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| (5) Support public and private efforts to prevent domestic abuse and child molestation, and assist victims of abuse and neglect. | | | ✓ |
| (6) Promote programs which assist people in need of family planning services to enable them to meet their needs. [L 1978, c 100, pt of §2; am L 1986, c 276, §21; am L 1990, c 67, §8] | | | ✓ |
| <i>Analysis:</i> The MRTTP does not plan for the State's socio-cultural advancement with regard to social services; therefore this objective and these policies are not applicable. | | | |
| <u>Chapter 226-23, Hawaii Revised Statutes, Objectives for Socio-Cultural Advancement - Leisure.</u> | | | |
| <u>Objective:</u> Planning for the State's socio-cultural advancement with regard to leisure shall be directed towards the achievement of the objective of the adequate provision of resources to accommodate diverse cultural, artistic, and recreational needs for present and future generations. | | | |
| <u>Policies:</u> | S | N/S | N/A |
| (1) Foster and preserve Hawaii's multi-cultural heritage through supportive cultural, artistic, recreational, and humanities-oriented programs and activities. | | | ✓ |
| (2) Provide a wide range of activities and facilities to fulfill the cultural, artistic, and recreational needs of all diverse and special groups effectively and efficiently. | ✓ | | |
| (3) Enhance the enjoyment of recreational experiences through safety and security measures, educational opportunities, and improved facility design and maintenance. | ✓ | | |
| (4) Promote the recreational and educational potential of natural resources having scenic, open space, cultural, historical, geological, or biological values while ensuring that their inherent values are preserved. | ✓ | | |
| (5) Ensure opportunities for everyone to use and enjoy Hawaii's recreational resources. | ✓ | | |
| (6) Assure the availability of sufficient resources to provide for future cultural, artistic, and recreational needs. | ✓ | | |
| (7) Provide adequate and accessible physical fitness programs to promote the physical and mental well-being of Hawaii's people. | ✓ | | |
| (8) Increase opportunities for appreciation and participation in the creative arts, including the literary, theatrical, visual, musical, folk, and traditional art forms. | | | ✓ |



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| (9) Encourage the development of creative expression in the artistic disciplines to enable all segments of Hawaii's population to participate in the creative arts. | | | ✓ |
| (10) Assure adequate access to significant natural and cultural resources in public ownership. [L 1978, c 100, pt of §2; am L 1986, c 276, §22] | ✓ | | |
| <p><u>Analysis:</u> As discussed in Section II.D.F.5 the MRTP master plan provides for an extensive network of neighborhood parks and open spaces, a unified pedestrian and bicycle system within the Park and connections to its existing and future surroundings. The system will connect residential areas, neighborhood parks and employment areas. Additionally the MRTP is subject to the Department of Parks and Recreation Parks Assessment that requires Maui R&T Partners, LLC, to provide land or money in lieu of, for recreational and leisure space in the Kihei-Makena Community Plan region.</p> | | | |
| <p><u>Chapter 226-24 Objective and policies for socio-cultural advancement-individual rights and personal well-being.</u></p> | | | |
| <p><u>Objective:</u> Planning for the State's socio-cultural advancement with regard to individual rights and personal well-being shall be directed towards achievement of the objective of increased opportunities and protection of individual rights to enable individuals to fulfill their socio-economic needs and aspirations.</p> | | | |
| <u>Policies:</u> | S | N/S | N/A |
| (1) Provide effective services and activities that protect individuals from criminal acts and unfair practices and that alleviate the consequences of criminal acts in order to foster a safe and secure environment. | | | ✓ |
| (2) Uphold and protect the national and state constitutional rights of every individual. | | | ✓ |
| (3) Assure access to, and availability of, legal assistance, consumer protection, and other public services which strive to attain social justice. | | | ✓ |
| (4) Ensure equal opportunities for individual participation in society. [L 1978, c 100, pt of §2; am L 1986, c 276, §23] | | | ✓ |
| <p><u>Analysis:</u> The MRTP does not plan for the State's socio-cultural advancement with regard to individual rights and personal well being; therefore this objective and these policies are not applicable.</p> | | | |
| <p><u>Chapter 226-25, Hawaii Revised Statutes, Objectives for Socio-Cultural Advancement - Culture.</u></p> | | | |
| <p><u>Objective:</u> Planning for the State's socio-cultural advancement with regard to culture shall be directed toward the achievement of the objective of enhancement of cultural identities, traditions, val-</p> | | | |



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| ues, customs, and arts of Hawaii's people. | | | |
| <u>Policies</u> | <u>S</u> | <u>N/S</u> | <u>N/A</u> |
| (1) Foster increased knowledge and understanding of Hawaii's ethnic and cultural heritages and the history of Hawaii. | | | ✓ |
| (2) Support activities and conditions that promote cultural values, customs, and arts that enrich the lifestyles of Hawaii's people and which are sensitive and responsive to family and community needs. | | | ✓ |
| (3) Encourage increased awareness of the effects of proposed public and private actions on the integrity and quality of cultural and community lifestyles in Hawaii. | | | ✓ |
| (4) Encourage the essence of the aloha spirit in people's daily activities to promote harmonious relationships among Hawaii's people and visitors. [L 1978, c 100, pt of §2; am L 1986, c 276, §24] | | | ✓ |
| <u>Analysis:</u> The MRTP does not plan for the State's socio-cultural advancement with regard to culture; therefore these objective and policies are not applicable. | | | |
| <u>Chapter 226-26 Objectives and policies for socio-cultural advancement-public safety.</u> | | | |
| <u>Objectives:</u> | <u>S</u> | <u>N/S</u> | <u>N/A</u> |
| (1) Assurance of public safety and adequate protection of life and property for all people. | | | ✓ |
| (2) Optimum organizational readiness and capability in all phases of emergency management to maintain the strength, resources, and social and economic well-being of the community in the event of civil disruptions, wars, natural disasters, and other major disturbances. | | | ✓ |
| (3) Promotion of a sense of community responsibility for the welfare and safety of Hawaii's people. | | | ✓ |
| <u>Policies related to public safety:</u> | | | |
| (1) Ensure that public safety programs are effective and responsive to community needs. | | | ✓ |
| (2) Encourage increased community awareness and participation in public safety programs. | | | ✓ |
| <u>Policies related to criminal justice:</u> | | | |



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| (1) Support criminal justice programs aimed at preventing and curtailing criminal activities. | | | ✓ |
| (2) Develop a coordinated, systematic approach to criminal justice administration among all criminal justice agencies. | | | ✓ |
| (3) Provide a range of correctional resources which may include facilities and alternatives to traditional incarceration in order to address the varied security needs of the community and successfully reintegrate offenders into the community. | | | ✓ |
| <u>Policies related to emergency management:</u> | | | |
| (1) Ensure that responsible organizations are in a proper state of readiness to respond to major war-related, natural, or technological disasters and civil disturbances at all times. | | | ✓ |
| (2) Enhance the coordination between emergency management programs throughout the State. [L 1978, c 100, pt of §2; am L 1986, c 276, §25] | | | ✓ |
| <i><u>Analysis:</u></i> The MRTP does include State public safety programs; therefore these objectives and policies are not applicable. | | | |
| <u>Chapter 226-27 Objectives and policies for socio-cultural advancement-government.</u> | | | |
| <u>Objectives:</u> Planning the State's socio-cultural advancement with regard to government shall be directed towards the achievement of the following objectives: | | | |
| (1) Efficient, effective, and responsive government services at all levels in the State. | | | ✓ |
| (2) Fiscal integrity, responsibility, and efficiency in the state government and county governments. | | | ✓ |
| <u>Policies:</u> | S | N/S | N/A |
| (1) Provide for necessary public goods and services not assumed by the private sector. | | | ✓ |
| (2) Pursue an openness and responsiveness in government that permits the flow of public information, interaction, and response. | | | ✓ |



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| (3) Minimize the size of government to that necessary to be effective. | | | ✓ |
| (4) Stimulate the responsibility in citizens to productively participate in government for a better Hawaii. | | | ✓ |
| (5) Assure that government attitudes, actions, and services are sensitive to community needs and concerns. | | | ✓ |
| (6) Provide for a balanced fiscal budget. | | | ✓ |
| (7) Improve the fiscal budgeting and management system of the State. | | | ✓ |
| (8) Promote the consolidation of state and county governmental functions to increase the effective and efficient delivery of government programs and services and to eliminate duplicative services wherever feasible. [L 1978, c 100, pt of §2; am L 1986, c 276, §26] | | | ✓ |
| <i>Analysis:</i> The MRTP does not involve planning the State's socio-cultural advancement with regard to government; therefore these objective and policies are not applicable. | | | |

PART III. PRIORITY GUIDELINES

The purpose of the priority guidelines of the Hawaii State Plan is to establish overall priority guidelines to address areas of statewide concern. The Hawaii State Plan notes that the State shall strive to improve the quality of life for Hawaii's present and future population through the pursuit of desirable courses of action in five major areas of statewide concern which merit priority attention: 1) economic development; 2) population growth 3) affordable housing; 4) crime and criminal justice; 5) quality education (226-102). The development of the MRTP Master Plan Update is in accordance with the following priority guidelines of the Hawaii State Plan.

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| Hawaii State Plan, Chapter 226, HRS Part III. Priority Guidelines Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable | S | N/S | N/A |
| HRS 226-101: Purpose. The purpose of this part is to establish overall priority guidelines to address areas of statewide concern. | | | |



HRS 226-102: Overall Direction. The State shall strive to improve the quality of life for Hawaii's present and future population through the pursuit of desirable courses of action in five major areas of statewide concern which merit priority attention: economic development, population growth and land resource management, affordable housing, crime and criminal justice, and quality education. [L 1978, c 100, pt of §2; am L 1986, c 276, §29]

HRS 226-103: Economic Priority Guidelines.

(a) Priority Guidelines to stimulate economic growth and encourage business expansion and development to provide needed jobs for Hawaii's people and achieve a stable and diversified economy;

| Priority Guidelines: | S | N/S | N/A |
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| (1) Seek a variety of means to increase the availability of investment capital for new and expanding enterprises. | | | ✓ |
| (A) Encourage investments which: | ✓ | | |
| (i) Reflect long term commitments to the State; | ✓ | | |
| (ii) Rely on economic linkages within the local economy; | ✓ | | |
| (iii) Diversify the economy; | ✓ | | |
| (iv) Reinvest in the local economy; | ✓ | | |
| (v) Are sensitive to community needs and priorities; and | ✓ | | |
| (vi) Demonstrate a commitment to provide management opportunities to Hawaii residents. | ✓ | | |
| (2) Encourage the expansion of technological research to assist industry development and support the development and commercialization of technological advancements. | ✓ | | |
| (3) Improve the quality, accessibility, and range of services provided by government to business, including data and reference services and assistance in complying with governmental regulations. | | | ✓ |
| (4) Seek to ensure that state business tax and labor laws and administrative policies are equitable, rational, and predictable. | | | ✓ |
| (5) Streamline the building and development permit and review process, and eliminate or consolidate other burdensome or duplicative governmental requirements imposed on business, where public health, safety and welfare | | | ✓ |



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| would not be adversely affected. | | | |
| (6) Encourage the formation of cooperatives and other favorable marketing or distribution arrangements at the regional or local level to assist Hawaii's small-scale producers, manufacturers, and distributors. | | | ✓ |
| (7) Continue to seek legislation to protect Hawaii from transportation interruptions between Hawaii and the continental United States. | | | ✓ |
| (8) Provide public incentives and encourage private initiative to develop and attract industries which promise long-term growth potentials and which have the following characteristics: | ✓ | | |
| (A) An industry that can take advantage of Hawaii's unique location and available physical and human resources. | ✓ | | |
| (B) A clean industry that would have minimal adverse effects on Hawaii's environment. | ✓ | | |
| (C) An industry that is willing to hire and train Hawaii's people to meet the industry's labor needs at all levels of employment. | | | ✓ |
| (D) An industry that would provide reasonable income and steady employment. | ✓ | | |
| (9) Support and encourage, through educational and technical assistance programs and other means, expanded opportunities for employee ownership and participation in Hawaii business. | | | ✓ |
| (10) Enhance the quality of Hawaii's labor force and develop and maintain career opportunities for Hawaii's people through the following actions: | ✓ | | |
| (A) Expand vocational training in diversified agriculture, aquaculture, information industry, and other areas where growth is desired and feasible. | | | ✓ |
| (B) Encourage more effective career counseling and guidance in high schools and post-secondary institutions to inform students of present and future career opportunities. | | | ✓ |
| (C) Allocate educational resources to career areas where high employment is expected and where growth of new industries is desired. | | | ✓ |
| (D) Promote career opportunities in all industries for Hawaii's people by encouraging firms doing business in the State to hire residents. | ✓ | | |
| (E) Promote greater public and private sector cooperation in determining industrial training needs and in developing relevant curricula and on-the-job training opportunities. | | | ✓ |



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| (F) Provide retraining programs and other support services to assist entry of displaced workers into alternative employment. | | | ✓ |
| (b) Priority guidelines to promote the economic health and quality of the visitor industry: | | | |
| Priority Guidelines: | S | N/S | N/A |
| (1) Promote visitor satisfaction by fostering an environment which enhances the Aloha Spirit and minimizes inconveniences to Hawaii's residents and visitors. | | | ✓ |
| (2) Encourage the development and maintenance of well-designed, adequately serviced hotels and resort destination areas which are sensitive to neighboring communities and activities and which provide for adequate shoreline setbacks and beach access. | | | ✓ |
| (3) Support appropriate capital improvements to enhance the quality of existing resort destination areas and provide incentives to encourage investment in upgrading, repair, and maintenance of visitor facilities. | | | ✓ |
| (4) Encourage visitor industry practices and activities which respect, preserve, and enhance Hawaii's significant natural, scenic, historic, and cultural resources. | | | ✓ |
| (5) Develop and maintain career opportunities in the visitor industry for Hawaii's people, with emphasis on managerial positions. | | | ✓ |
| (6) Support and coordinate tourism promotion abroad to enhance Hawaii's share of existing and potential visitor markets. | | | ✓ |
| (7) Maintain and encourage a more favorable resort investment climate consistent with the objectives of this chapter. | | | ✓ |
| (8) Support law enforcement activities that provide a safer environment for both visitors and residents alike. | | | ✓ |
| (9) Coordinate visitor industry activities and promotions to business visitors through the state network of advanced data communication techniques. | | | ✓ |
| (c) Priority guidelines to promote the continued viability of the sugar and pineapple industries: | | | |
| Priority Guidelines: | S | N/S | N/A |
| (1) Provide adequate agricultural lands to support the economic viability of the sugar and pineapple industries. | | | ✓ |
| (2) Continue efforts to maintain federal support to provide stable sugar prices | | | ✓ |



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| high enough to allow profitable operations in Hawaii. | | | |
| (3) Support research and development, as appropriate, to improve the quality and production of sugar and pineapple crops. | | | ✓ |
| (d) Priority guidelines to promote the growth and development of diversified agriculture and aquaculture: | | | |
| (1) Identify, conserve, and protect agricultural and aquacultural lands of importance and initiate affirmative and comprehensive programs to promote economically productive agricultural and aquacultural uses of such lands. | | | ✓ |
| (2) Assist in providing adequate, reasonably priced water for agricultural activities. | | | ✓ |
| (3) Encourage public and private investment to increase water supply and to improve transmission, storage, and irrigation facilities in support of diversified agriculture and aquaculture. | | | ✓ |
| (4) Assist in the formation and operation of production and marketing associations and cooperatives to reduce production and marketing costs. | | | ✓ |
| (5) Encourage and assist with the development of a waterborne and airborne freight and cargo system capable of meeting the needs of Hawaii's agricultural community. | | | ✓ |
| (6) Seek favorable freight rates for Hawaii's agricultural products from interisland and overseas transportation operators. | | | ✓ |
| (7) Encourage the development and expansion of agricultural and aquacultural activities which offer long-term economic growth potential and employment opportunities. | | | ✓ |
| (8) Continue the development of agricultural parks and other programs to assist small independent farmers in securing agricultural lands and loans. | | | ✓ |
| (9) Require agricultural uses in agricultural subdivisions and closely monitor the uses in these subdivisions. | | | ✓ |
| (10) Support the continuation of land currently in use for diversified agriculture. | | | ✓ |
| (e) Priority guidelines for water use and development: | | | |
| Priority Guidelines: | S | N/S | N/A |
| (1) Maintain and improve water conservation programs to reduce the overall water consumption rate. | ✓ | | |



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| (2) Encourage the improvement of irrigation technology and promote the use of non-potable water for agricultural and landscaping purposes. | ✓ | | |
| (3) Increase the support for research and development of economically feasible alternative water sources. | | | ✓ |
| (4) Explore alternative funding sources and approaches to support future water development programs and water system improvements. | ✓ | | |
| (f) Priority guidelines for energy use and development: | | | |
| Priority Guidelines: | S | N/S | N/A |
| (1) Encourage the development, demonstration, and commercialization of renewable energy sources. | ✓ | | |
| (2) Initiate, maintain, and improve energy conservation programs aimed at reducing energy waste and increasing public awareness of the need to conserve energy. | ✓ | | |
| (3) Provide incentives to encourage the use of energy conserving technology in residential, industrial, and other buildings. | | | ✓ |
| (4) Encourage the development and use of energy conserving and cost-efficient transportation systems. | ✓ | | |
| (g) Priority guidelines to promote the development of the information industry: | | | |
| Priority Guidelines: | S | N/A | N/A |
| (1) Establish an information network that will serve as the catalyst for establishing a viable information industry in Hawaii. | | | ✓ |
| (2) Encourage the development of services such as financial data processing, products and services exchange, foreign language translations, telemarketing, teleconferencing, a twenty-four-hour international stock exchange, international banking, and a Pacific Rim management center. | ✓ | | |
| (3) Encourage the development of small businesses in the information field such as software development, the development of new information systems and peripherals, data conversion and data entry services, and home or cottage services such as computer programming, secretarial, and accounting services. | ✓ | | |



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| (4) Encourage the development or expansion of educational and training opportunities for residents in the information and telecommunications fields. | ✓ | | |
| (5) Encourage research activities, including legal research in the information and telecommunications fields. | | | ✓ |
| (6) Support promotional activities to market Hawaii's information industry services. [L 1978, c 100, pt of §2; am L 1984, c 236, §15; am L 1986, c 276, §30; am L Sp 1988, c 1, §6; am L 1989, c 250, §2] | | | ✓ |

Analysis: The MRTP has been an existing technology based business park since the 1980's and currently has 25 businesses employing over 400 employees in a variety of high-technology and supporting businesses. However, the pace of the Park's development has been slower than desired due to a number of factors. The purpose of the Master Plan Update is to remove barriers that have slowed the optimal build-out of the site. The MRTP Master Plan Update and amendment of the zoning ordinance will broaden the types of uses permitted in the Park from a narrow high-technology focus to a more encompassing knowledge-based industry focus. In addition, supportive accessory uses will be allowed in the park and development standards will be modified to allow for smaller lot sizes and greater flexibility to attract a broader range of desirable businesses with a diversified offering. New Urbanism planning techniques and urban design strategies will make the MRTP a more vibrant and attractive environment for businesses to locate and grow their operations. The types of knowledge based businesses that will be encouraged to locate in the park will include information and software development, financial data processing, software development together with many other knowledge-based fields. The Master Plan Update will expand Maui's employer base and increase employment and management opportunities for residents.

As discussed in Section III.D.6 (Utilities) the MRTP will include energy-efficient design and conservation measures. Specifically, the Design Guidelines will encourage the use of energy efficient technology throughout the Park, specifically, in lighting, air-conditioning, and building materials. Solar hot water heaters will be utilized throughout the residential portion of the development and installation of Photovoltaic Energy Systems will be encouraged in all areas of the MRTP. Additionally, the MRTP currently has an ongoing solar energy demonstration project and actively promotes research and development in a variety of technologies, including renewable energy.

As discussed in Section III.B.3 (Economy) the MRTP is projected to generate approximately \$1.39 billion of direct capital investment into the Maui economy and will provide an estimated 63,507



“worker years” of employment and \$2.7 billion in total wages over a 19 year period. This will result in expenditures that will have a positive direct, indirect and induced impact on the County of Maui economy. During the operations phase, the MRTP will significantly increase the level of capital investment in the region which will create employment opportunities and create an economic stimulus for the region. The MRTP will provide direct employment opportunities for Maui residents and contribute to the diversification and growth of the Island’s and State’s economies. After “stabilization” is estimated that the Park will support 5,878 jobs with an annual payroll of about \$217 million.

Chapter 226-104, HRS, Population Growth and Land Resources Priority Guidelines

(a) Priority guidelines to effect desired statewide growth and distribution:

| Priority Guidelines: | S | N/S | N/A |
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| (1) Encourage planning and resource management to insure that population growth rates throughout the State are consistent with available and planned resource capacities and reflect the needs and desires of Hawaii's people. | ✓ | | |
| (2) Manage a growth rate for Hawaii's economy that will parallel future employment needs for Hawaii's people. | ✓ | | |
| (3) Ensure that adequate support services and facilities are provided to accommodate the desired distribution of future growth throughout the State. | ✓ | | |
| (4) Encourage major state and federal investments and services to promote economic development and private investment to the neighbor islands, as appropriate. | | | ✓ |
| (5) Explore the possibility of making available urban land, low-interest loans, and housing subsidies to encourage the provision of housing to support selective economic and population growth on the neighbor islands. | | | ✓ |
| (6) Seek federal funds and other funding sources outside the State for research, program development, and training to provide future employment opportunities on the neighbor islands. | ✓ | | |
| (7) Support the development of high technology parks on the neighbor islands. | ✓ | | |

(b) Priority guidelines for regional growth distribution and land resource utilization:

| Priority Guidelines: | S | N/S | N/A |
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| (1) Encourage urban growth primarily to existing urban areas where adequate | ✓ | | |



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| public facilities are already available or can be provided with reasonable public expenditures, and away from areas where other important benefits are present, such as protection of important agricultural land or preservation of lifestyles. | | | |
| (2) Make available marginal or nonessential agricultural lands for appropriate urban uses while maintaining agricultural lands of importance in the agricultural district. | ✓ | | |
| (3) Restrict development when drafting of water would result in exceeding the sustainable yield or in significantly diminishing the recharge capacity of any groundwater area. | | | ✓ |
| (4) Encourage restriction of new urban development in areas where water is insufficient from any source for both agricultural and domestic use. | | | ✓ |
| (5) In order to preserve green belts, give priority to state capital-improvement funds which encourage location of urban development within existing urban areas except where compelling public interest dictates development of a non-contiguous new urban core. | | | ✓ |
| (6) Seek participation from the private sector for the cost of building infrastructure and utilities, and maintaining open spaces. | ✓ | | |
| (7) Pursue rehabilitation of appropriate urban areas. | | | ✓ |
| (8) Support the redevelopment of Kakaako into a viable residential, industrial, and commercial community. | | | ✓ |
| (9) Direct future urban development away from critical environmental areas or impose mitigating measures so that negative impacts on the environment would be minimized. | ✓ | | |
| (10) Identify critical environmental areas in Hawaii to include but not be limited to the following: watershed and recharge areas; wildlife habitats (on land and in the ocean); areas with endangered species of plants and wildlife; natural streams and water bodies; scenic and recreational shoreline resources; open space and natural areas; historic and cultural sites; areas particularly sensitive to reduction in water and air quality; and scenic resources. | | | ✓ |
| (11) Identify all areas where priority should be given to preserving rural character and lifestyle. | | | ✓ |
| (12) Utilize Hawaii's limited land resources wisely, providing adequate land to accommodate projected population and economic growth needs while ensuring the protection of the environment and the availability of the shoreline, | ✓ | | |



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| conservation lands, and other limited resources for future generations. | | | |
| (13) Protect and enhance Hawaii's shoreline, open spaces, and scenic resources. [L 1978, c 100, pt of §2; am L 1984, c 236, §16; am L 1986, c 276, §31] | | | ✓ |

Analysis: As discussed in Section III.B.1 (Population) the MRTP Master Plan Update will provide housing and employment opportunities for the growing population of the Kihei-Makena region. The subject property is located within the proposed Maui Island Plan's Urban Growth Boundary and the property is designated for urban use (Project District 6) in the Kihei-Makena Community Plan. Significant urban development and supporting infrastructure exists on the site and the urban area of Central Kihei is in close proximity.

As discussed in Section III.D (Infrastructure) MRTP will be responsible for all required infrastructure improvements including water source and system improvements for ~~potable~~ drinking water use, on-site drainage improvements, a portion of regional traffic related improvements attributable to the project, required on- and off-site wastewater system improvements and utility upgrades as determined by the appropriate governmental agencies and public utility companies.

From a site planning perspective, the Master Plan Update design layout carefully considered the natural topography of the site and incorporated unique natural areas into parks and open spaces throughout the MRTP. Proposed buildings were incorporated into the natural topography of the property and building layout is oriented to preserve view planes towards the Pacific Ocean.

As discussed in Section III.C.4 (Schools) the Project site is being designed to accommodate a public and/or private elementary or intermediate school campus within the Village Center. In addition, in 2007, the Hawaii Legislature enacted Act 245 as Section 302A, HRS, "School Impact Fees". Based upon this legislation, the Department of Education has enacted impact fees for residential developments that occur within indented school impact districts. The Project is within the boundaries of the Central Maui Impact District and is within the Makawao Cost Area of that district. Projects within the district and cost area pay a construction fee and either a fee-in-lieu of land or a land donation, at the DOE's discretion. At the appropriate time, the applicant will contact the DOE to enter into an impact fee agreement.

As discussed in Section III.C.3 (Police and Fire protection services) increased tax revenues generated by the project will provide additional funds to the County for police and fire capital facility improvements and service upgrades. Additionally, the applicant will comply with any impact fee



ordinances for police and fire.

As discussed in Section III.A.10 (Agricultural Resources) the development of the MRTP will not reduce the inventory of agriculturally significant lands. The property is rated “E” with some portions “Unclassified” under the LSB classification system. The property is “Unclassified” under the ALISH classification system, indicating that the property is not agriculturally significant.

Finally, the MRTP is not located within the State’s Special Management Area and no listed or endangered species of flora and fauna were identified on the property. During build-out and during the operation phase best management practices will be implemented to mitigate non-point source pollution to Maui’s coastal resources as well as to mitigate fugitive dust impacts. In addition, through the EIS and entitlement application processes mitigation measures will be identified to help address any environmental impacts that may arise from the project.

Chapter 226-105 Crime and criminal justice.

| Priority guidelines in the area of crime and criminal justice: | S | N/S | N/A |
|---|----------|------------|------------|
| (1) Support law enforcement activities and other criminal justice efforts that are directed to provide a safer environment. | | | ✓ |
| (2) Target state and local resources on efforts to reduce the incidence of violent crime and on programs relating to the apprehension and prosecution of repeat offenders. | | | ✓ |
| (3) Support community and neighborhood program initiatives that enable residents to assist law enforcement agencies in preventing criminal activities. | | | ✓ |
| (4) Reduce overcrowding or substandard conditions in correctional facilities through a comprehensive approach among all criminal justice agencies which may include sentencing law revisions and use of alternative sanctions other than incarceration for persons who pose no danger to their community. | | | ✓ |
| (5) Provide a range of appropriate sanctions for juvenile offenders, including community-based programs and other alternative sanctions. | | | ✓ |
| (6) Increase public and private efforts to assist witnesses and victims of | | | ✓ |



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| crimes and to minimize the costs of victimization. [L 1978, c 100, pt of §2; am L 1984, c 236, §17; am L 1986, c 276, §32] | | | |
| <u>Analysis:</u> The priority guidelines for crime and criminal justice are not applicable to the MRTTP. | | | |
| <u>Chapter 226-106 Affordable housing. Priority guidelines for the provision of affordable housing:</u> | | | |
| Priority guidelines for the provision of affordable housing: | S | N/S | N/A |
| (1) Seek to use marginal or nonessential agricultural land and public land to meet housing needs of low- and moderate-income and gap-group households. | ✓ | | |
| (2) Encourage the use of alternative construction and development methods as a means of reducing production costs. | | | ✓ |
| (3) Improve information and analysis relative to land availability and suitability for housing. | | | ✓ |
| (4) Create incentives for development which would increase home ownership and rental opportunities for Hawaii's low- and moderate-income households, gap-group households, and residents with special needs. | ✓ | | |
| (5) Encourage continued support for government or private housing programs that provide low interest mortgages to Hawaii's people for the purchase of initial owner- occupied housing. | | | ✓ |
| (6) Encourage public and private sector cooperation in the development of rental housing alternatives. | | | ✓ |
| (7) Encourage improved coordination between various agencies and levels of government to deal with housing policies and regulations. | | | ✓ |
| (8) Give higher priority to the provision of quality housing that is affordable for Hawaii's residents and less priority to development of housing intended primarily for individuals outside of Hawaii. [L 1986, c 276, §33; am L 1989, c | ✓ | | |



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| 250, §3] | | | |
| <p><u>Analysis:</u> As discussed in Section III.B.2 (Housing) the MRTP will offer a mix of single and multi-family housing types. The MRTP will include affordable housing units in compliance with Chapter 2.96, MCC Residential Workforce housing Policy. Workforce homes will be subject to the requirements of Chapter 2.96, MCC to ensure that affordable homes are available for full time Maui residents.</p> | | | |
| <p><u>Chapter 226-107 Quality education.</u></p> | | | |
| <p>Priority guidelines to promote quality education:</p> | | | |
| Priority Guidelines: | S | N/S | N/A |
| (1) Pursue effective programs which reflect the varied district, school, and student needs to strengthen basic skills achievement; | | | ✓ |
| (2) Continue emphasis on general education "core" requirements to provide common background to students and essential support to other university programs; | | | ✓ |
| (3) Initiate efforts to improve the quality of education by improving the capabilities of the education work force; | | | ✓ |
| (4) Promote increased opportunities for greater autonomy and flexibility of educational institutions in their decision making responsibilities; | | | ✓ |
| (5) Increase and improve the use of information technology in education by the availability of telecommunications equipment for: | | | ✓ |
| (A) The electronic exchange of information; | | | ✓ |
| (B) Statewide electronic mail; and | | | ✓ |
| (C) Access to the Internet. | | | ✓ |
| <p>Encourage programs that increase the public's awareness and understanding of the impact of information technologies on our lives;</p> | | | |



| | | | |
|--|--|--|---|
| (1) Pursue the establishment of Hawaii's public and private universities and colleges as research and training centers of the Pacific; | | | ✓ |
| (2) Develop resources and programs for early childhood education; | | | ✓ |
| (3) Explore alternatives for funding and delivery of educational services to improve the overall quality of education; and | | | ✓ |
| (4) Strengthen and expand educational programs and services for students with special needs. [L 1986, c 276, §34; am L 1999, c 178, §18] | | | ✓ |

Analysis: As discussed in Section III.C.4 (Schools) the Project site is being designed to accommodate a public and/or private elementary or intermediate school campus within the Village Center. In addition, in 2007, the Hawaii Legislature enacted Act 245 as Section 302A, HRS, "School Impact Fees". Based upon this legislation, the Department of Education has enacted impact fees for residential developments that occur within indentified school impact districts. The Project is within the boundaries of the Central Maui Impact District and is within the Makawao Cost Area of that district. Projects within the district and cost area pay a construction fee and either a fee-in-lieu of land or a land donation, at the DOE's discretion. At the appropriate time, the applicant will contact the DOE to enter into an impact fee agreement.

In addition, the MRTP site may be conducive to future higher education uses that desire a neighbor island location, within close proximity to one of the State's leading technology clusters. The Master Plan Update identifies potential higher education uses and incorporates sufficient space for campus-type development near the employment/technology core.

D. HAWAII STATE FUNCTIONAL PLANS

The Hawaii State Plan directs State agencies to prepare functional plans for their respective program areas. There are fourteen (14) State Functional Plans that serve as the primary implementing vehicle for the goals, objectives, and policies of the Hawaii State Plan.



| Hawaii State Functional Plans | S | N/S | N/A |
|--|---|-----|-----|
| Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable | | | |
| Agriculture State Functional Plan | | | |
| Objectives: | S | N/S | N/A |
| a. Achievement of increased agricultural production and growth through cultural and management practices. | | | ✓ |
| b. Achievement of an orderly agricultural marketing system through product promotion and industry organization. | | | ✓ |
| c. Achievement of optimal contribution by agriculture to the State's economy. | | | ✓ |
| e. Achievement of adequate capital, and knowledge of its proper management, for agricultural development. | | | ✓ |
| f. Achievement of increased agricultural production and growth through pest and disease controls. | | | ✓ |
| g. Achievement of effective protection and improved quality of Hawaii's land, water, and air. | | | ✓ |
| h. Achievement of productive agricultural use of lands most suitable and needed for agricultural use. | ✓ | | |
| i. Achievement of efficient and equitable provision of adequate water for agricultural use. | | | ✓ |
| j. Achievement of maximum degree of public understanding and support of agriculture in Hawaii. | | | ✓ |
| k. Achievement of adequate supply of properly trained labor for agricultural needs. | | | ✓ |
| l. Achievement of adequate transportation services and facilities to meet agricultural needs. | | | ✓ |
| m. Achievement of adequate support services and infrastructure to meet agricultural needs. | | | ✓ |
| Analysis: The development of the MRTP will not reduce the inventory of agriculturally significant lands. As discussed in Section III.A 44 10 (Agricultural Resources) the property is rated "E" with some portions "Unclassified" under the LSB classification system. The property is "Unclassified" under the ALISH classification system, indicating that the property is not agriculturally significant. | | | |



| Conservation Lands State Functional Plan | | | |
|--|---|-----|-----|
| Objectives: | S | N/S | N/A |
| 1a. Establishment of data bases for inventories of existing lands and resources. | | | ✓ |
| 1b. Establishment of criteria for management of land and natural resources. | | | ✓ |
| 2a. Establishment of plans for natural resources and land management. | | | ✓ |
| 2b. Protection of fragile or rare natural resources. | | | ✓ |
| 2c. Enhancement of natural resources. | | | ✓ |
| 2d. Appropriate development of natural resources designated for commercial development. | ✓ | | |
| 2e. Promotion and marketing of appropriate natural resources designated for commercial development. | | | ✓ |
| 2f. Increase enforcement of land and natural resource use laws and regulations. | | | ✓ |
| 3a. Develop and implement conservation education programs for the general public and visitors. | | | ✓ |
| 3b. Increase access to land and natural resources data by the public and increase cooperation between agencies by making access to land and natural resource information more efficient. | | | ✓ |
| <p>Analysis: The MRTP is not located within the State Conservation District; however the MRTP is located adjacent to two gulches. The Master Plan Update design incorporates generous landscape buffers at the edge of the MRTP near the gulches. In addition, as part of the EIS a Flora and Fauna Assessment was prepared to identify any rare or endangered species on the property. None were identified. However, in response to comments from the U.S. Fish & Wildlife Service, certain precautionary mitigation measures will be implemented as described in Section III.A.5 (Flora and Fauna) and Table 27 28 (DEIS Comment and Response Letters). Appendix N (Early Consultation Letters).</p> | | | |



| Education State Functional Plan | | | |
|--|---|-----|-----|
| Objectives: | S | N/S | N/A |
| A1. Academic Excellence. Emphasize quality educational programs in Hawaii's institutions to promote academic excellence. | | | ✓ |
| A2. Basic Skills. Promote programs and activities that facilitate the acquisition of basic skills, such as reading, writing, computing, listening, speaking, and reasoning. Pursue effective programs which reflect the varied district, school, and student needs to strengthen basic skills achievement. | | | ✓ |
| A3. Education Workforce. Initiate efforts to improve the quality of education by improving the capabilities of the education workforce. | | | ✓ |
| A4. Services and Facilities. Ensure the provision of adequate and accessible educational services and facilities that are designed to meet individual and community needs. | | | ✓ |
| B1. Alternatives for funding and delivery. Explore alternatives for funding and delivery of educational services to improve the overall quality of education. | | | ✓ |
| B2. Autonomy and flexibility. Promote increased opportunities for greater autonomy and flexibility of educational institutions in their decision making responsibilities. | | | ✓ |
| B3. Increase use of Technology. Increase and improve the use of information technology in education and encourage programs which increase the public's awareness and understanding of the impact of information technologies on our lives. | | | ✓ |
| B4. Personal Development. Support education programs and activities that enhance personal development, physical fitness, recreation, and cultural pursuits of all groups. | | | ✓ |
| B5. Students with Special Needs. Provide appropriate educational opportunities for groups with special needs. | | | ✓ |
| C1. Early Childhood Education. Develop resources and programs for early childhood education. | | | ✓ |
| C2. Hawaii's Cultural Heritage. Promote educational programs which enhance understanding of Hawaii's cultural heritage. | | | ✓ |
| C3. Research programs and (Communication) Activities. Support research programs and activities that enhance the education programs of the State. | | | ✓ |



Analysis: As discussed in Section III.C.4 (Schools) the Project site is being designed to accommodate a public and/or private elementary or intermediate school campus within the Village Center. In addition, in 2007, the Hawaii Legislature enacted Act 245 as Section 302A, HRS, "School Impact Fees". Based upon this legislation, the Department of Education has enacted impact fees for residential developments that occur within indented school impact districts. The Project is within the boundaries of the Central Maui Impact District and is within the Makawao Cost Area of that district. Projects within the district and cost area pay a construction fee and either a fee-in-lieu of land or a land donation, at the DOE's discretion. At the appropriate time, the applicant will contact the DOE to enter into an impact fee agreement.

In addition, the MRTP site may be conducive to future higher education uses that desire an outer island location, within close proximity to one of the State's leading technology clusters. The Master Plan Update identifies potential higher education uses and incorporates sufficient space for campus-type development near the employment/technology core.

Employment State Functional Plan

| Objectives: | S | N/S | N/A |
|---|----------|------------|------------|
| a. Improve the qualifications of entry-level-workers and their transition to employment. | | | ✓ |
| b. Develop and deliver education, training and related services to ensure and maintain a quality and competitive workforce. | | | ✓ |
| c. Improve labor exchange. | | | ✓ |
| d. Improve the quality of life for workers and families. | ✓ | | |
| e. Improve planning of economic development, employment and training activities. | ✓ | | |

Analysis: The purpose of the Master Plan Update is to better align the MRTP to respond to the needs of high-technology and knowledge-based businesses and institutions, both large and small, seeking to open and expand on Maui. This is accomplished by creating greater flexibility in the controlling ordinances to reduce costs for employers and to provide greater amenities and services for their employees.

The MRTP will improve the quality of life for workers and families by providing homes, services, schools and other daily needs near existing employment, thereby decreasing automobile use and promoting healthier modes of transportation.



| Energy State Functional Plan | | | |
|---|---|-----|-----|
| Objectives: | S | N/S | N/A |
| a. Moderate the growth in energy demand through conservation and energy efficiency. | ✓ | | |
| b. Displace oil and fossil fuels through alternate and renewable energy resources. | ✓ | | |
| c. Promote energy education and legislation. | | | ✓ |
| d. Support and develop an integrated approach to energy development and management. | | | ✓ |
| e. Ensure State's ability to implement energy emergency actions immediately in event of fuel supply disruptions. Ensure essential public services are maintained and provisions are made to alleviate economic and personal hardships which may arise. | | | ✓ |
| <p>Analysis: The MRTP will include energy-efficient design and conservation measures. Specifically, the Design Guidelines will encourage the use of energy efficient technology throughout the Park, specifically, in lighting, air-conditioning, and building materials. Solar hot water heaters will be utilized throughout the residential portion of the development and installation of Photovoltaic Energy Systems will be encouraged in all areas of the MRTP.</p> | | | |
| Health State Functional Plan | | | |
| Objectives: | S | N/S | N/A |
| 1. Health promotion and disease prevention. Reduction in the incidence, morbidity and mortality associated with the preventable and controllable conditions. | | | ✓ |
| 2. Prevention and control of communicable diseases. Reduction in the incidence, morbidity, and mortality associated with infectious and communicable diseases. | | | ✓ |
| 3. Health needs of special populations with impaired access to health care. Increased availability and accessibility of health services for groups with impaired access to health care programs. | | | ✓ |
| 4. Community hospitals system. Development of a community hospital system which is innovative, responsive and supplies high quality care to the constituencies it serves. | | | ✓ |



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| 5. Environmental programs to protect and enhance the environment. Continued development of new environmental protection and health services programs to protect, monitor, and enhance the quality of life in Hawaii. | | | ✓ |
| 6. DOH leadership. To improve the Department of Health's ability to meet the public health need of the State of Hawaii in the most appropriate, beneficial and economical way possible. | | | ✓ |
| Analysis: The MRTP does not propose the creation of medical or health programs; therefore, the Health State Functional Plan is not applicable. However, the master plan update will allow for medical research facilities, medical clinics, doctors offices and hospitals to locate within the Park. | | | |
| Higher Education State Functional Plan | | | |
| Objectives: | S | N/S | N/A |
| A. A number and variety of postsecondary education institutions sufficient to provide the diverse range of programs required to satisfy individual and societal needs and interests. | | | ✓ |
| B. The highest level of quality, commensurate with its mission and objectives, of each educational, research, and public service program offered in Hawaii by an institution of higher education. | | | ✓ |
| C. Provide appropriate educational opportunities for all who are willing and able to benefit from postsecondary education. | | | ✓ |
| D. Provide financing for postsecondary education programs sufficient to ensure adequate diversity, high quality, and wide accessibility. | | | ✓ |
| E. Increase program effectiveness and efficiency through better coordination of education resources. | | | ✓ |
| Analysis: The MRTP site may be conducive to future higher education uses that desire an outer island location, within close proximity to one of the State's leading technology clusters. The Master Plan Update identifies potential higher education uses and incorporates sufficient space for campus-type development near the employment/technology core. | | | |
| Historic Preservation State Functional Plan | | | |
| Objectives: | S | N/S | N/A |
| A. Identification of historic properties. | ✓ | | |
| B. Protection of historic properties. | ✓ | | |



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|---|----------|------------|------------|
| C. Management and treatment of historic properties. | | | ✓ |
| D. Provision of adequate facilities to preserve. | | | ✓ |
| E. The establishment of programs to collect and conserve historic records, artifacts, and oral histories and to document and perpetuate traditional arts, skills, and culture. | | | ✓ |
| F. Provision of better access to historic information. | | | ✓ |
| G. Enhancement of skills and knowledge needed to preserve historical resources. | | | ✓ |
| <p>Analysis: In preparing the Master Plan Update, and the supporting Environmental Impact Statement, professionally prepared Cultural Impact Assessment and Archaeological Impact Assessment reports concluded that cultural and archaeological impacts would not be caused by the project.</p> <p>In a letter dated October 27, 2008 the State Historic Preservation Division recommended that Site -6241 should be bordered by a protective orange construction fencing prior to ground altering disturbance within TMK: (2) 2-2-024:017. (See: Appendix D1) Maui R&T Partners, LLC will provide an orange protective fence to be placed along Site -6241, which is a wall on the northern ridgeline boundary of Parcel 17.</p> | | | |
| Housing State Functional Plan | | | |
| Objectives and Policies: | S | N/S | N/A |
| A. Homeownership for at least sixty percent, or roughly 248,500 households by the year 2000. | | | ✓ |
| B. Sufficient amount of affordable rental housing units by the year 2000 so as to increase the State's rental vacancy rate to at least 3% with priority given to increasing the supply of units affordable to very low and lower income households. | | | ✓ |
| C. Increased development of rental housing units for the elderly and other special needs groups to afford them an equal access to housing. | | | ✓ |
| D. Preservation of existing public and private housing stock. | | | ✓ |
| E. Acquire and designate land suitable for housing development in sufficient amount to locate the deficit in housing units by the year 2000. | | | ✓ |
| F. Maintain a statewide housing data system for use by public and private agencies engaged in the provision of housing. | | | ✓ |



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| <p>Analysis: The MRTP does not directly relate to the Housing Functional Plan’s objectives; however the MRTP will help satisfy the growing demand for housing in Kihei-Makena by providing a variety of housing options including affordable workforce housing in compliance with Chapter 2.96, MCC.</p> | | | |
| <p>Human Services State Functional Plan</p> | | | |
| Objectives and Policies: | S | N/S | N/A |
| A. To sustain and improve current elder abuse and neglect services. | | | ✓ |
| B. To increase cost-effective, high quality home and community based services. | | | ✓ |
| C. To increase home-based services to keep children in their homes and to increase placement resources for those children who must be temporarily or permanently removed from their homes, due to abuse or neglect. | | | ✓ |
| D. To address factors that contribute to child abuse and other forms of family violence. | | | ✓ |
| E. To provide affordable, accessible, and quality child care. | | | ✓ |
| F. To maximize efforts of self-sufficiency through provision of transitional medical care services. | | | ✓ |
| G. To provide AFDC recipients with a viable opportunity to become independent of the welfare system. | | | ✓ |
| H. To facilitate client access to human services. | | | ✓ |
| I. To eliminate organizational barriers which limit client access to human services. | | | ✓ |
| <p>Analysis: The MRTP does not include the creation of human service programs; therefore, the Human Services Functional Plan is not applicable.</p> | | | |
| <p>Recreation State Functional Plan</p> | | | |
| Objectives and Policies: | S | N/S | N/A |
| 1a. Address the problem of saturation of the capacity of beach parks and near-shore waters. | | | ✓ |
| 1b. Reduce the incidence of ocean recreation accidents. | | | ✓ |
| 1c. Resolve conflicts between different activities at heavily used ocean recreation areas. | | | ✓ |



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| 1d. Provide adequate boating facilities. Balance the demand for boating facilities against the need to protect the marine environment from potential adverse impacts. | | | ✓ |
| 2a. Plan, develop, and promote recreational activities and facilities in mauka and other areas to provide a wide range of alternatives. | ✓ | | |
| 2b. Meet special recreation needs of the elderly, the disabled, woman, single-parent families, immigrants, and other groups. | | | ✓ |
| 2c. Improve and expand the provision of recreation facilities in urban areas and local communities. | ✓ | | |
| 3a. Prevent the loss of access to shoreline and upland recreation areas due to new developments. | | | ✓ |
| 3b. Resolve the problem of landowner liability that seriously hampers public access over private lands. | | | ✓ |
| 3c. Increase access to State Forest Reserve lands over federal property, leased State lands, and other government lands. | | | ✓ |
| 3d. Acquire, develop, and manage additional public access ways. | ✓ | | |
| 4a. Promote a conservation ethic in the use of Hawaii's recreational resources. | ✓ | | |
| 4b. Prevent degradation of the marine environment. | ✓ | | |
| 4c. Improve the State's enforcement capabilities. | | | ✓ |
| 4d. Mitigate adverse impacts of tour helicopters on the quality of recreational experiences in wilderness areas. | | | ✓ |
| 5a. Properly maintain existing park and recreation areas. | | | ✓ |
| 5b. Promote interagency coordination and cooperation to facilitate sharing of resources, joint development efforts, clarification of responsibilities and jurisdictions, and improvements in enforcement capabilities. | | | ✓ |
| 5c. Assure adequate support for priority outdoor recreation programs and facilities. | | | ✓ |
| 6a. Increase recreational access and opportunities in Hawaii's wetlands. | | | ✓ |
| 6b. Develop and adequate information base to assist the County planning departments and other regulatory agencies in making decisions regarding the wetlands. | | | ✓ |
| 6c. Assure the protection of the most valuable wetlands in the State. | | | ✓ |
| Analysis: As discussed in Section II.F.5 the MRTP master plan provides mini- and neighborhood active and passive recreation parks together with an open space network and a unified pedestrian | | | |



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|--|-----------------|-------------------|-------------------|
| <p>and bicycle system to connect these facilities with the Park’s existing and future surroundings. The system will connect residential areas, neighborhood parks and employment areas. In addition, the MRTP will comply with the requirements of the Department of Parks and Recreation Parks Assessment that requires land or money for each residential unit developed. There are no wetlands located in the MRTP.</p> | | | |
| <p>Tourism State Functional Plan</p> | | | |
| <p>Objectives:</p> | <p>S</p> | <p>N/S</p> | <p>N/A</p> |
| <p>1a. Development, implementation and maintenance of policies and actions which support the steady and balanced growth of the visitor industry.</p> | | | <p>✓</p> |
| <p>2a. Development and maintenance of well-designed visitor facilities and related developments which are sensitive to the environment, sensitive to neighboring communities and activities, and adequately serviced by infrastructure and support services.</p> | | | <p>✓</p> |
| <p>3a. Enhancement of respect and regard for the fragile resources which comprise Hawaii’s natural and cultural environment. Increased preservation and maintenance efforts.</p> | | | <p>✓</p> |
| <p>4a. Support of Hawaii’s diverse range of lifestyles and natural environment.</p> | | | <p>✓</p> |
| <p>4b. Achievement of mutual appreciation among residents, visitors, and the visitor industry.</p> | | | <p>✓</p> |
| <p>5a. Development of a productive workforce to maintain a high quality visitor industry.</p> | | | <p>✓</p> |
| <p>5b. Enhancement of career and employment opportunities in the visitor destination in specific desired market segments.</p> | | | <p>✓</p> |
| <p>6a. Maintenance of a high customer awareness of Hawaii as a visitor destination in specific desired market segments.</p> | | | <p>✓</p> |
| <p><u>Analysis:</u> The MRTP is not targeting the visitor industry. However, a site for a business hotel is proposed in the Master Plan Update to provide an amenity to the businesses and institutions located within the Park.</p> | | | |
| <p>Transportation State Functional Plan</p> | | | |



| Objectives: | S | N/S | N/A |
|--|----------|------------|------------|
| 1a. Expansion of transportation system. | ✓ | | |
| 1b. Reduction of travel demand through zoning and decentralization initiatives. | ✓ | | |
| 1c. Management of existing transportation systems through a program of transportation systems management (TSM). | | | ✓ |
| 1d. Identification and reservation of lands and right-of-way required for future transportation improvements. | | | ✓ |
| 1e. Planning and designing State highways to enhance inter-regional mobility. | ✓ | | |
| 1f. Improving and enhancing transportation safety. | ✓ | | |
| 1g. Improved transportation maintenance programs. | | | ✓ |
| 1h. Ensure that transportation facilities are accessible to people with disabilities. | | | ✓ |
| 2a. Development of a transportation infrastructure that supports economic development initiatives. | ✓ | | |
| 3a. Expansion of revenue bases for transportation improvements. | | | ✓ |
| 4a. Providing educational programs. | | | ✓ |
| <p><u>Analysis:</u> As discussed in Section III.D (Infrastructure) the MRTP will provide a variety of traffic related improvements that will address the traffic impacts specifically related to the Park. In addition, the Park will coordinate with neighboring land owners, State and County to address the need for regional improvements that will be warranted by development of the Park, together with neighboring projects. Regional Traffic improvements may include planning for collector roads to enhance the inter-regional mobility in Kihei and South Maui.</p> <p>The MRTP's non-vehicular transportation strategy includes: 1) compact and mixed-use development patterns, 2) pedestrian oriented streets integrating street trees, sidewalks, and traffic calming, 3) both striped and separated bike lanes in appropriate locations, 4) a network of greenways and parkways to facilitate mobility, and 5) providing connectivity to adjacent developments, such as the Kihei High School and uses makai of Piilani Highway.</p> <p>In addition, transportation demand management measures include: 1) encouraging alternate work schedules and off peak hours for employment generators, and 2) supporting park and ride, ride-sharing, carpooling and van pooling, regional and sub-regional shuttles.</p> | | | |



| Water Resources Development State Functional Plan | | | |
|---|---|-----|-----|
| Objectives: | S | N/S | N/A |
| a. Enunciate State water policy and improve management framework. | | | ✓ |
| b. Maintain the long-term availability of freshwater supplies, giving consideration to the accommodation of important environmental values. | ✓ | | |
| c. Improve management of floodplains. | | | ✓ |
| d. Assure adequate municipal water supplies for planned urban growth. | | | ✓ |
| e. Assure the availability of adequate water for agriculture. | | | ✓ |
| f. Encourage and coordinate with other water programs the development of self-supplied industrial water and the production of water-based energy. | | | ✓ |
| g. provide for the protection and enhancement of Hawaii's freshwater and estuarine environment. | ✓ | | |
| h. Improve State grant and loan procedures for water program and projects. | | | ✓ |
| i. Pursue water resources data collection and research to meet changing needs. | | | ✓ |
| <p><u>Analysis:</u> The proposed project will be served by the County's public <u>drinking</u> water system, should the County make such <u>drinking</u> water available. In the event that the County does not have sufficient capacity to provide potable <u>drinking</u> water, then the Applicant will coordinate with the State and County to develop a private source of <u>drinking</u> water either on the property or on adjacent lands as described in the land use analysis section of the EIS. A water source development study was conducted and is included in Appendix J. If County <u>drinking</u> water is not available, the project anticipates sourcing its <u>drinking</u> waters from on- or off-site wells drawing brackish groundwater from the Kamaole Aquifer. The pumpage from the wells will be well within the State Commission on Water Resources Management's (CWRM's) definition of the sustainable supply for such an aquifer. In addition, the subject wells should have minimal impact on the quality of the region's ground water resources. It is anticipated that the subject development may produce a slight increase in nitrogen of between 0.8 to 0.9 percent and in phosphorus of .03 to .04 percent, which should produce minimal impact to ground water quality.</p> <p>Any source of <u>drinking</u> water for the project will be developed and managed in a manner that complies with all State and County laws. In developing the property, Best Management Practices will be incorporated to mitigate potential impacts to the State's freshwater and estuarine environment.</p> | | | |



E. MAUI COUNTY GENERAL PLAN

1. County-wide Policy Plan

The County-wide Policy Plan establishes a list of county-wide goals, objectives, policies, and implementing actions related to key strategies. The following are directly related to the proposed MRTP Master Plan Update.

| | | | |
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| Countywide Policy Plan Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable | S | N/S | N/A |
| Protect the Natural Environment | | | |
| Goal: Maui County's natural environment and distinctive open spaces will be preserved, managed, and cared for in perpetuity. | | | |
| Objective: | S | N/S | N/A |
| (1) Improve the opportunity to experience the natural beauty and native biodiversity of the islands for present and future generations. | ✓ | | |
| Policies: | | | |
| a. Perpetuate native Hawaiian biodiversity by preventing the introduction of invasive species, containing or eliminating existing noxious pests, and protecting critical habitat areas. | ✓ | | |
| b. Preserve and reestablish indigenous and endemic species' habitats and their connectivity. | | | ✓ |
| c. Restore and protect forests, wetlands, watersheds, and stream flows, and guard against wildfires, flooding and erosion. | ✓ | | |
| d. Protect baseline stream flows for perennial streams, and support policies that ensure adequate stream flow to support native Hawaiian aquatic | | | ✓ |



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| species, traditional kalo cultivation, and self-sustaining ahupua'a. | | | |
| e. Protect undeveloped beaches, dunes, and coastal ecosystems, and restore natural shoreline processes. | | | ✓ |
| f. Protect the natural state and integrity of unique terrain, valued natural environments, and geological features. | ✓ | | |
| g. Preserve and provide ongoing care for important scenic vistas, view planes, landscapes, and open-space resources. | ✓ | | |
| h. Expand coordination with the State and non profit agencies and their volunteers to reduce invasive species, replant indigenous species, and identify critical habitat. | ✓ | | |
| Implementing Actions: | | | |
| a. Develop island-wide networks of greenways, watercourses, and habitat corridors. | ✓ | | |
| <p>Analysis: The MRTP is not located within the State's Special Management Area and no listed or endangered species of flora and fauna were identified on the property. During build-out and during the operation phase best management practices will be implemented to mitigate non-point source pollution to Maui's coastal resources as well as to mitigate fugitive dust impacts. In addition, through the EIS and entitlement application processes mitigation measures will be identified to help address any environmental impacts that may arise from the project.</p> <p>From a site planning perspective, the Master Plan Update design layout carefully considered the natural topography of the site and incorporated unique natural areas into parks and open spaces throughout the MRTP. Proposed buildings were incorporated into the natural topography of the property and building layout is oriented to preserve view planes towards the Pacific Ocean.</p> | | | |
| Objective: | | | |
| (2) Improve the quality of environmentally sensitive, locally valued natural resources and native ecology of each island. | | | |
| Policies: | S | N/S | N/A |
| a. Protect and restore nearshore reef environments and water quality | ✓ | | |



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| b. Protect marine resources and valued wildlife | ✓ | | |
| c. Improve the connection between urban environments and the natural landscape, and incorporate natural features of the land into urban design. | ✓ | | |
| d. Utilize land-conservation tools to ensure the permanence of valued open spaces. | ✓ | | |
| e. Mitigate the negative effects of upland uses on coastal wetlands, marine life, and coral reefs. | ✓ | | |
| f. Strengthen coastal zone management, re-naturalization of shorelines, where possible, and filtration or treatment of urban and agricultural runoff. | ✓ | | |
| g. Regulate the use and maintenance of stormwater-treatment systems that incorporate the use of native vegetation and mimic natural systems. | ✓ | | |
| h. Advocate for stronger regulation of fishing, boating, cruise ship, and ecotourism activities. | | | ✓ |
| i. Restore watersheds and aquifer-recharge areas to healthy and productive status, and increase public knowledge about the importance of watershed stewardship, water conservation, and ground water protection. | | | ✓ |
| Implementing Actions: | | | |
| a. Develop regulations to minimize runoff of pollutants into nearshore waters and reduce nonpoint and point source pollution. | | | ✓ |
| <p>Analysis: The MRTP is not located within the State’s Special Management Area and is not expected to impact the shoreline or reef environments. During build-out and during the operation phase best management practices will be implemented to mitigate non-point source pollution to Maui’s coastal resources. In addition, through the EIS and entitlement application processes mitigation measures will be identified to help address any environmental impacts that may arise from the project. The site itself is not located within an area of critical habitat and surveys have confirmed that no threatened or endangered species of flora or fauna are on the property.</p> <p>From a site planning perspective, the master plan design layout carefully considered the natural topography of the site and incorporated unique natural areas into parks and open spaces throughout the MRTP. Proposed buildings were incorporated into the natural topography of the property and building layout is oriented to preserve view planes towards the Pacific Ocean.</p> | | | |



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| Objective: | | | |
| (3) Improve the stewardship of the natural environment. | | | |
| Policies: | S | N/S | N/A |
| a. Preserve and protect natural resources with significant scenic, economic, cultural, environmental, or recreational value. | ✓ | | |
| b. Improve communication, coordination, and collaboration among government agencies, non profit organizations, communities, individuals, and land owners that work for the protection of the natural environment. | ✓ | | |
| c. Evaluate development to assess potential short-term and long-term impacts on land, air, aquatic, and marine environments. | ✓ | | |
| d. Improve efforts to mitigate and plan for the impact of natural disasters, human influenced emergencies, and global warming. | ✓ | | |
| e. Regulate access to sensitive ecological sites and landscapes. | | | ✓ |
| f. Reduce air, noise, light, land, and water pollution, and reduce Maui County's contribution to global climate change. | ✓ | | |
| g. Plan and prepare for and educate visitors and residents about the possible effects of global warming. | | | |
| h. Provide public access to beaches and shoreline for recreational and cultural purposes where appropriate. | | | |
| i. Educate the construction and landscape industries and property owners about the use of best management practices to prevent erosion and non-point source pollution. | ✓ | | |
| j. Support the acquisition of resources with scenic, environmental, and recreational value, and encumber their use. | | | ✓ |
| k. Improve enforcement activities relating to the natural environment. | | | ✓ |
| l. For each shoreline community, identify and prioritize beach conservation objectives, and develop action plans for their implementation. | | | ✓ |
| Implementing Actions: | S | N/S | N/A |
| a. Document, record, and monitor existing conditions, populations, and locations of flora and fauna communities. | ✓ | | |
| b. Implement Federal and State policies that require a reduction of gree- | | | ✓ |



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| house-gas emissions. | | | |
| c. Establish a baseline inventory of available natural resources and their respective carrying capacity. | | | ✓ |
| <p>Analysis: The MRTP is not located within the State’s Special Management Area and no listed or endangered species of flora and fauna were identified on the property. During build-out and during the operation phase best management practices will be implemented to mitigate non-point source pollution to Maui’s coastal resources as well as to mitigate fugitive dust impacts. In addition, through the EIS and entitlement application processes mitigation measures will be identified to help address any environmental impacts that may arise from the project.</p> <p>As discussed in Section III.A.3 (Natural Hazards) the development of the MRTP will not increase the possibility of natural hazards such as flooding, tsunami inundation, hurricanes and earthquakes. The MRTP will be constructed in compliance with County, State and Federal standards.</p> <p>As discussed in Section III.A.6 (Air Quality) the MRTP may create short term impacts on air quality directly and indirectly during construction, however mitigation measures will be implemented. It is anticipated that the MRTP does not violate Federal or State air quality standards.</p> <p>As discussed in Section III.D.6 (Utilities) the MRTP will include energy-efficient design and conservation measures. Specifically, the design guidelines will encourage the use of energy efficient technology throughout the Park, specifically, in lighting, air-conditioning, and building materials. Solar hot water heaters will be utilized throughout the residential portion of the development and installation of Photovoltaic Energy Systems will be encouraged in all areas of the MRTP.</p> <p>In addition, the MRTP is utilizing smart growth planning techniques that will help to reduce automobile trips and associated pollution. The design will help to minimize automobile trips by providing employment, goods, services and housing all within walking or biking distance of each other. The MRTP Master Plan Update has a unified pedestrian and bicycle system within the Park and connections to its existing and future surroundings.</p> | | | |
| Objective : | S | N/S | N/A |
| (4) Educate residents and visitors about responsible stewardship practices and the interconnectedness of the natural environment and people. | | | ✓ |
| Policies: | | | |



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| a. Expand education about native flora, fauna, and ecosystems. | | | ✓ |
| b. Align priorities to recognize the health of the natural environment and the health of people. | ✓ | | |
| c. Promote programs and incentives that decrease greenhouse-gas emissions and improve environmental stewardship. | ✓ | | |
| <p>Analysis: The MRTP is not located within the State’s Special Management Area and no listed or endangered species of flora and fauna were identified on the property. During build-out and during the operation phase best management practices will be implemented to mitigate non-point source pollution. In addition, through the EIS and entitlement application processes mitigation measures will be identified to help address any environmental impacts that may arise from the project.</p> <p>As discussed in Section II.E.3 and 4 (Proposed Action) the MRTP Master Plan Update creates a settlement pattern that by its more compact and mixed-use character is less dependent on motorized transportation. The Plan also makes considerable investment into infrastructure that supports a unified pedestrian and bicycle system within the Park with connections to its existing and future surroundings. The system will connect residential areas, neighborhood parks and employment areas.</p> <p>As discussed in Section III.D.6 (Utilities) the MRTP will include energy-efficient design and conservation measures. Specifically, the design guidelines will encourage the use of energy efficient technology throughout the Park, specifically, in lighting, air-conditioning, and building materials. Solar hot water heaters will be utilized throughout the residential portion of the development and installation of Photovoltaic Energy Systems will be encouraged in all areas of the MRTP.</p> | | | |
| B. Preserve Local Cultures and Traditions | | | |
| <p>Goal: Maui County will foster a spirit of pono and protect, perpetuate, and reinvigorate its residents’ multi-cultural values and traditions to ensure that current and future generations will enjoy the benefits of their rich island heritage.</p> | | | |
| Objective: | S | N/S | N/A |
| (1) Perpetuate the Hawaiian culture as a vital force in the lives of residents. | | | ✓ |
| Policies: | | | |



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| a. Protect and preserve access to mountain, ocean, and island resources for traditional Hawaiian cultural practices. | ✓ | | |
| b. Prohibit inappropriate development of cultural lands and sites that are important for traditional Hawaiian cultural practices, and establish mandates for the special protection of these lands in perpetuity. | ✓ | | |
| c. Promote the use of ahupua'a and moku management practices. | | | ✓ |
| d. Encourage the use of traditional Hawaiian architecture and craftsmanship. | | | ✓ |
| e. Promote the use of the Hawaiian language. | | | ✓ |
| f. Recognize and preserve the unique natural and cultural characteristics of each ahupua'a or district. | ✓ | | |
| g. Encourage schools to promote broader incorporation of Hawaiian and other local cultures' history and value lessons into curriculum. | | | ✓ |
| h. Ensure the protection of Native Hawaiian rights. | ✓ | | |
| i. Promote, encourage, and require the correct use of traditional place names, particularly in government documents, signage, and tourism industry. | ✓ | | |
| Implementing Actions: | | | |
| a. Establish alternative land use and overlay zoning designations that recognize and preserve the unique natural and cultural characteristics of each ahupua'a or district. | | | ✓ |
| b. Develop requirements for all County applicants to perpetuate and use proper traditional place names in all applications submitted. | | | ✓ |
| <p>Analysis: As discussed in Section III.A.8 (Historical and Archaeological Resources) the Project's AIS yielded a very limited number of sites which is consistent with the Barren Zone model for pre-contact settlement in the Kihei area; therefore <u>no</u> further archaeological work is recommended for this project area.</p> <p>As discussed in Section III.B.4 (Cultural Resources) the Project's CIA reported that there were no visible cultural resources, i.e. medicinal plants, shoreline resources, religious sites, or archeological resources observed on the property. From a cultural practices and beliefs perspective, the subject property bears no apparent signs of cultural practices or gatherings currently taking place. The oral</p> | | | |



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| <p>history interviews did not reveal any known gathering places on the subject property or any access concerns as a result of the proposed Project. Therefore it can be concluded that development of the site will <u>not</u> impact cultural resources on the property or within its immediate vicinity.</p> | | | |
| <p>Objective:</p> | | | |
| <p>(2) Emphasize respect for our island lifestyle and our unique local cultures, family, and natural environment.</p> | <p>✓</p> | | |
| <p>Policies:</p> | <p>S</p> | <p>N/S</p> | <p>N/A</p> |
| <p>a. Acknowledge the Hawaiian culture as the host culture, and foster respect and humility among residents and visitors toward the Hawaiian people and their practices.</p> | | | <p>✓</p> |
| <p>b. Perpetuate a respect for diversity, and recognize the historic blending of cultures and ethnicities.</p> | | | <p>✓</p> |
| <p>c. Encourage the perpetuation of each culture's unique cuisine, attire, dance, music, and folklore, and other unique island traditions and recreational activities.</p> | | | <p>✓</p> |
| <p>d. Recognize the interconnectedness between the natural environment and the cultural heritage of the islands.</p> | <p>✓</p> | | |
| <p>e. Protect and prioritize funding for recreational activities that support local cultural practices, such as surfing, fishing, and outrigger-canoe paddling.</p> | | | <p>✓</p> |
| <p>Analysis: In preparing the Master Plan Update, and the supporting Environmental Impact Statement, professionally prepared Cultural Impact Assessment and Archaeological Impact Assessment reports concluded that cultural and archaeological impacts would not be caused by the project.</p> | | | |
| <p>Objective:</p> | | | |
| <p>(3) Preserve for present and future generations the opportunity to know and experience the arts, culture, and history of Maui County.</p> | <p>S</p> | <p>N/S</p> | <p>N/A</p> |
| <p>Policies:</p> | | | |
| <p>a. Foster teaching opportunities for cultural practitioners to share their knowledge and skills.</p> | | | <p>✓</p> |
| <p>b. Support the development of cultural centers.</p> | | | <p>✓</p> |



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| c. Broaden opportunities for public art and the display of local artwork. | | | ✓ |
| d. Foster the Aloha Spirit by celebrating the Hawaiian host culture and other Maui County cultures through support of cultural-education programs, festivals, celebrations, and ceremonies. | | | ✓ |
| e. Support the perpetuation of Hawaiian arts and culture. | | | ✓ |
| f. Support programs and activities that record the oral and pictorial history of residents. | | | ✓ |
| g. Support the development of repositories for culture, history, genealogy, oral history, film, and interactive learning. | | | ✓ |
| Implementing Actions: | | | |
| a. Establish incentives for the display of public art. | | | ✓ |
| b. Establish centers and programs of excellence for the perpetuation of Hawaiian arts and culture. | | | ✓ |
| Analysis: Objective 3, its policies and implementing actions are not applicable to the MRTP project. | | | |
| Objective: | | | |
| (4) Preserve and restore significant historic architecture, structures, cultural sites, cultural districts, and cultural landscapes. | ✓ | | |
| Policies: | S | N/S | N/A |
| a. Support the development of island-wide historic, archaeological, and cultural resources inventories. | ✓ | | |
| b. Promote the rehabilitation and adaptive reuse of historic sites, buildings, and structures to perpetuate a traditional sense of place. | | | ✓ |
| c. Identify a sustainable rate of use and set forth specific policies to protect cultural resources. | | | ✓ |
| d. Protect and preserve lands that are culturally or historically significant. | ✓ | | |
| e. Support programs that protect, record, restore, maintain, provide education about, and interpret cultural districts, landscapes, sites, and artifacts in both natural and museum settings. | | | ✓ |
| f. Perpetuate the authentic character and historic integrity of rural communities and small towns. | | | ✓ |



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| g. Seek solutions that honor the traditions and practices of the host culture while recognizing the needs of the community. | | | ✓ |
| h. Support the development of an Archaeological District Ordinance. | | | ✓ |
| i. Protect summits, slopes, and ridgelines from inappropriate development. | | | ✓ |
| j. Support the registering of important historic sites on the State and Federal historic registers. | | | ✓ |
| k. Provide opportunities for public involvement with restoration and enhancement of all types of cultural resources. | | | ✓ |
| l. Foster partnerships to identify and preserve or revitalize historic and cultural sites. | | | ✓ |
| Implementing Actions: | S | N/S | N/A |
| a. Identify, develop, map, and maintain an inventory of locally significant natural, cultural, and historical resources for protection. | ✓ | | |
| b. Prepare, continually update, and implement a cultural-management plan for cultural sites, districts, and landscapes, where appropriate. | | | ✓ |
| c. Enact an Archaeological District Ordinance. | | | ✓ |
| d. Nominate important historic sites to the State and Federal historic registers. | | | ✓ |
| Analysis: In preparing the Master Plan Update, and the supporting Environmental Impact Statement, professionally prepared Cultural Impact Assessment and Archaeological Impact Assessment reports concluded that cultural and archaeological impacts would not be caused by the project. | | | |
| C. Improve Education | | | |
| Goal: Residents will have access to lifelong formal and informal educational options enabling them to realize their ambitions. | | | |
| Objective: | | | |
| (1) Encourage the State to attract and retain school administrators and educators of the highest quality. | | | |



| Policies: | S | N/S | N/A |
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| a. Encourage the State to provide teachers with nationally competitive pay and benefit packages. | ✓ | | |
| b. Encourage the State to ensure teachers will have the teaching tools and support staff needed to provide students with an excellent education. | | | ✓ |
| c. Explore Maui County district- and school-based decision making in public education. | | | ✓ |
| Analysis: Objective 1 and its subordinate policies are not applicable to the MRTP. | | | |
| Objective: | | | |
| (2) Provide nurturing learning environments that build skills for the 21st century. | | | |
| Policies: | S | N/S | N/A |
| a. Expand professional-development opportunities in disciplines that support the economic-development goals of Maui County. | ✓ | | |
| b. Plan for demographic, social, and technological changes in a timely manner. | | | ✓ |
| c. Encourage collaborative partnerships to improve conditions of learning environments. | | | ✓ |
| d. Promote development of neighborhood schools and educational centers. | ✓ | | |
| e. Integrate schools, community parks, and playgrounds, and expand each community's use of these facilities. | ✓ | | |
| f. Support coordination between land use and school-facility planning agencies. | ✓ | | |
| g. Encourage the upgrade and ongoing maintenance of public-school facilities. | | | ✓ |
| h. Encourage the State Department of Education to seek reliable, innovative, and alternative methods to support a level of per-pupil funding that places Hawai'i among the top tier of states nationally for its financial support of public schools. | | | ✓ |
| i. Encourage the State to promote healthier, more productive learning en- | | | ✓ |



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| vironments, including by providing healthy meals, more physical activity, natural lighting, and passive cooling. | | | |
| j. Encourage the State to support the development of benchmarks to measure the success of Hawaii’s public-education system and clarify lines of accountability. | | | ✓ |
| k. Design school and park facilities in proximity to residential areas. | ✓ | | |
| l. Support technology- and natural-environment-based learning. | ✓ | | |
| m. Encourage the State to support lower student-teacher ratios in public schools. | | | ✓ |
| n. Encourage alternative learning and educational opportunities. | | | ✓ |
| Implementing Actions: | | | |
| a. Develop safe walking and bicycling programs for school children. | ✓ | | |
| <p>Analysis: As discussed in Section III.C.4 (Schools) the MRTP Master Plan Update proposes residential use on a portion of the property together with two public and/or private school sites, likely for elementary and intermediate school children. In addition, the MRTP may be required to contribute a school impact fee, per unit to be determined at a future date by the State of Hawaii, Department of Education. In addition, the MRTP site may be conducive to future higher education uses that desire a neighbor island location, within close proximity to one of the State’s leading technology clusters. The Project site is being planned to accommodate a robust active transportation network of pedestrian and bicycling infrastructure to link employment, residential, education, civic and commercial uses.</p> | | | |
| Objective 3: | | | |
| Provide all residents with educational opportunities that can help them better understand themselves and their surroundings and allow them to realize their ambitions. | | | |
| Policies: | S | N/S | N/A |
| a. Encourage the State to improve Maui Community College as a comprehensive community college that will serve each community. | | | ✓ |
| b. Broaden the use of technology and telecommunications to improve educational opportunities throughout the County. | | | |



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| c. Attract graduate-level research programs and institutions. | ✓ | | |
| d. Promote the teaching of traditional practices, including aquaculture; subsistence agriculture; Pacific Island, Asian, and other forms of alternative health practices; and indigenous Hawaiian architecture. | | | ✓ |
| e. Integrate cultural and environmental values in education, including self-sufficiency and sustainability. | ✓ | | |
| f. Foster a partnership and ongoing dialogue between business organizations, formal educational institutions, and vocational training centers to tailor learning and mentoring programs to County needs. | ✓ | | |
| g. Ensure teaching of the arts to all ages. | | | ✓ |
| h. Expand and develop vocational learning opportunities by establishing trade schools. | | | ✓ |
| i. Encourage the State to integrate financial and economic literacy in elementary, secondary, and higher-education levels. | | | ✓ |
| Implementing Actions: | | | |
| a. Encourage the State to establish a four-year university, and support the development of other higher-education institutions to enable residents to obtain bachelor degrees and postgraduate degrees in Maui County. | | | ✓ |
| Analysis: Although the MRTP will not directly establish education programs, the Park will seek to be an attractive location for such activities to occur, especially as these programs may relate to emerging industries. Moreover, the Park may offer the opportunity for relationships to be developed between the DOE and businesses within the Park for the purpose of introducing students to emerging and high-technology based-industries. | | | |
| Objective: | | | |
| (4) Maximize community-based educational opportunities. | | | |
| Policies: | S | N/S | N/A |
| a. Encourage the State and others to expand pre-school, after-school, and home-based (parent-child) learning. | | | ✓ |
| b. Support public-private partnerships to develop youth-internship, - | | | ✓ |



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| apprenticeship, and -mentoring programs. | | | |
| c. Support the development of a wide range of informal educational and cultural programs for all residents. | | | ✓ |
| d. Improve partnerships that utilize the skills and talents at Hawaii's colleges and universities to benefit the County. | | | ✓ |
| e. Support career-development and job-recruitment programs and centers. | | | ✓ |
| f. Attract learning institutions and specialty schools to diversify and enhance educational opportunities. | | | ✓ |
| g. Expand education of important life skills for the general public. | | | ✓ |
| h. Support community facilities such as museums, libraries, nature centers, and open spaces that provide interactive-learning opportunities for all ages. | | | ✓ |
| Analysis: Although the MRTP will not directly establish education programs, the Park will seek to be an attractive location for such activities to occur, especially as these programs may relate to emerging industries. Moreover, the Park may offer the opportunity for relationships to be developed between the DOE and businesses within the Park for the purpose of introducing students to emerging and high-technology based-industries. | | | |
| D. Strengthen Social and Healthcare Services | | | |
| Goal: Health and social services in Maui County will fully and comprehensively serve all segments of the population. | | | |
| Objective: | | | |
| (1) In cooperation with the Federal and State governments and nonprofit agencies, broaden access to social and healthcare services and expand options to improve the overall wellness of the people of Maui County. | | | |
| Policies: | S | N/S | N/A |
| a. Work with other levels of government and the nonprofit sector to expand services to address hunger, homelessness, and poverty. | | | ✓ |
| b. Support the improvement of opportunities for disadvantaged youth, encourage the tradition of hanai relatives, and support expanded opportunities for foster care. | | | ✓ |



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| c. Support expanded long-term-care options, both in institutions and at home, for patients requiring ongoing assistance and medical attention. | | | ✓ |
| d. Encourage the expansion and improvement of local hospitals, facilitate the establishment of new healthcare facilities, and facilitate prompt and high-quality emergency- and urgent-care services for all. | | | ✓ |
| e. Support broadened access to affordable health insurance and health care, and recognize the unique economic challenges posed to families when healthcare services are provided off-island. | | | ✓ |
| f. Encourage equal access to social and healthcare services through both technological and traditional means. | | | ✓ |
| Analysis: The MRTP does not include the creation of health or social services; therefore, this objective and these policies are not directly applicable. However, the Master Plan Update will allow medical services such as doctor's offices, clinics, hospitals, and ancillary services. | | | |
| Objective: | | | |
| (2) Encourage the Federal and State governments and the private sector to improve the quality and delivery of social and healthcare services. | | | |
| Policies: | S | N/S | N/A |
| a. Strengthen partnerships with government, nonprofit, and private organizations to provide funding and to improve counseling and other assistance to address substance abuse, domestic violence, and other pressing social challenges. | | | ✓ |
| b. Encourage the State to improve the quality of medical personnel, facilities, services, and equipment. | | | ✓ |
| c. Encourage investment to improve the recruitment of medical professionals and the quality of medical facilities and equipment throughout Maui County. | | | ✓ |
| d. Promote the development of continuum-of-care facilities that provide assisted-living, hospice, home-care, and skilled-nursing options allowing the individual to be cared for in a manner congruent with his or her needs and desires. | | | ✓ |



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| e. Support improved social, healthcare, and governmental services for special needs populations. | | | ✓ |
| f. Plan for the needs of an aging population and the resulting impacts on social services, housing, and healthcare delivery. | | | ✓ |
| g. Improve coordination among the police, the courts, and the public in the administration of social and healthcare services. | | | ✓ |
| h. Support programs that address needs of veterans. | | | ✓ |
| i. Support programs that address the needs of immigrants. | | | ✓ |
| Implementing Actions: | | | |
| a. Invest in programs designed to improve the general welfare and quality of life of Native Hawaiians. | | | ✓ |
| b. Assist and facilitate the State Department of Public Safety and others in efforts to strengthen programs and facilities that will improve the mental and social health of incarcerated people and assist in prison inmates' successful transition back into Maui County communities. | | | ✓ |
| c. Develop and maintain a comprehensive index that will measure the health and wellness needs of families. | | | ✓ |
| d. Provide heliports countywide for emergency health and safety purposes. | | | ✓ |
| Analysis: The MRTP does not include the creation of health or social services; therefore, this objective and these policies are not directly applicable. However, the Master Plan Update will allow medical services such as doctor's offices, clinics, hospitals, and ancillary services. | | | |
| Objective: | | | |
| (3) Strengthen public-awareness programs related to healthy lifestyles and social and medical services. | | | |



| Policies: | S | N/S | N/A |
|--|----------|------------|------------|
| a. Expand public awareness about personal safety and crime prevention. | | | ✓ |
| b. Encourage residents to pursue education and training for careers in the healthcare, social services, and community-development fields. | | | ✓ |
| c. Expand public awareness and promote programs to achieve healthy eating habits and drug-free lifestyles. | | | ✓ |
| Analysis: The MRTP does not include the creation of health or social services; therefore, this objective and these policies are not directly applicable. However, the MRTP design layout promotes a healthy lifestyle by offering <u>designated</u> walking and bicycling pathways that connect residential areas to the commercial areas and park spaces. | | | |
| E. Expand Housing Opportunities for Residents | | | |
| Goal: Quality, island-appropriate housing will be available to all residents. | | | |
| Objective: | | | |
| (1) Reduce the affordable housing deficit for residents. | | | |
| Policies: | S | N/S | N/A |
| a. Ensure that an adequate and permanent supply of affordable housing, both new and existing units, is made available for purchase or rental to our resident and/or workforce population, with special emphasis on providing housing for low- to moderate-income families, and ensure that all affordable housing remains affordable in perpetuity. | ✓ | | |
| b. Seek innovative ways to lower housing costs without compromising the quality of our island lifestyle. | ✓ | | |
| c. Seek innovative methods to secure land for the development of low- and moderate-income housing. | ✓ | | |
| d. Provide the homeless population with emergency and transitional shelter and other supportive programs. | | | ✓ |
| e. Provide for a range of senior-citizen and special needs housing choices on each island that affordably facilitates a continuum of care and services. | | | ✓ |
| f. Support the Department of Hawaiian Home Lands' development of homestead lands. | | | ✓ |



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| g. Manage property-tax burdens to protect affordable resident homeownership. | | | ✓ |
| h. Explore taxation mechanisms to increase and maintain access to affordable housing. | | | ✓ |
| i. Improve awareness regarding available affordable homeowner's insurance. | | | ✓ |
| j. Redevelop commercial areas with a mixture of affordable residential and business uses, where appropriate. | ✓ | | |
| k. Ensure residents are given priority to obtain affordable housing units developed in their communities, consistent with all applicable regulations. | ✓ | | |
| l. Establish pricing for affordable housing that is more reflective of Maui County's workforce than the United States Housing and Urban Development's median-income estimates for Maui County. | | | ✓ |
| m. Develop neighborhoods with a mixture of accessible and integrated community facilities and services. | ✓ | | |
| n. Provide alternative regulatory frameworks to facilitate the use of Kuleana lands by the descendants of Native Hawaiians who received those lands pursuant to the Kuleana Act of 1850. | | | ✓ |
| o. Work with lending institutions to expand housing options and safeguard the financial security of homeowners. | | | ✓ |
| p. Promote the use of the community land trust model and other land-lease and land-financing options. | | | ✓ |
| q. Support the opportunity to age in place by providing accessible and appropriately designed residential units. | ✓ | | |
| <p>Analysis: As discussed in Section III.B.2 (Housing) the MRTP will offer a mix of single and multi-family housing types. The MRTP will include affordable housing units in compliance with Chapter 2.96, MCC Residential Workforce Housing Policy. Workforce homes will be subject to the requirements of Chapter 2.96, MCC to ensure the affordable homes are available for full time Maui residents.</p> | | | |
| <p>Objective:</p> | | | |
| <p>(2) Increase the mix of housing types in towns and neighborhoods to promote sustainable land use planning, expand consumer choice, and protect the County's rural and small-town character.</p> | | | |
| Policies: | S | N/S | N/A |



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| a. Seek innovative ways to develop `ohana' cottages and accessory-dwelling units as affordable housing. | | | ✓ |
| b. Design neighborhoods to foster interaction among neighbors. | ✓ | | |
| c. Encourage a mix of social, economic, and age groups within neighborhoods. | ✓ | | |
| d. Promote infill housing in urban areas at scales that capitalize on existing infrastructure, lower development costs, and are consistent with existing or desired patterns of development. | ✓ | | |
| e. Encourage the building industry to use environmentally sustainable materials, technologies, and site planning. | ✓ | | |
| f. Develop workforce housing in proximity to job centers and transit facilities. | ✓ | | |
| g. Provide incentives to developers and owners who incorporate green building practices and energy-efficient technologies into their housing developments. | ✓ | | |
| Implementing Actions: | | | |
| a. Revise laws to support neighborhood designs that incorporate a mix of housing types that are appropriate for island living. | ✓ | | |
| <p>Analysis: The Master Plan Update was led by the nationally recognized New Urbanism town planning firm Calthorpe & Associates. Peter Calthorpe, and his staff, prepared a site plan that integrates the dominant land use - employment - with diverse opportunities for housing, commercial and businesses services, and civic uses. The Plan reduces automobile dependency from both within and outside of the Park by creating a "complete community" where most daily needs are readily available of a five minute walk or bicycle ride.</p> <p>In addition, the proposed New Urbanism planning techniques and urban design strategies will make the MRTP a more vibrant and attractive environment for businesses to locate and grow their operations. The Park is a long established employment center and is envisioned to become an even more important one in the next several decades. Recognizing the importance of locating jobs near housing, the Plan incorporates a diversity of housing opportunities, including single-family and various types of multi-family, within the Park itself. While the proposed housing won't create a complete equilibrium of jobs-housing, it will significantly alleviate the necessity for vehicular trips to and from the Park. The Park is also located close to regional shopping, recreation and educational facilities that together with retail and civic uses programmed for the Park will make it a com-</p> | | | |



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| <p>plete and distinct community within the larger Kihei community.</p> <p>As discussed in Section III.B.2 (Housing) the MRTP will offer a mix of single and multi-family housing types. The MRTP will include affordable housing units in compliance with Chapter 2.96, MCC Residential Workforce housing Policy. Workforce homes will be subject to the requirements of Chapter 2.96, MCC to ensure the affordable homes are available for full time Maui residents.</p> | | | |
| <p>Objective:</p> | | | |
| <p>(3) Increase and maintain the affordable housing inventory.</p> | | | |
| <p>Policies:</p> | <p>S</p> | <p>N/S</p> | <p>N/A</p> |
| <p>a. Recognize housing as a basic human need, and work to fulfill that need.</p> | <p>✓</p> | | |
| <p>b. Prioritize available infrastructure capacity for affordable housing.</p> | <p>✓</p> | | |
| <p>c. Improve communication, collaboration, and coordination among housing providers and social-service organizations.</p> | | | <p>✓</p> |
| <p>d. Study future projected housing needs, monitor economic cycles, and prepare for future conditions on each island.</p> | | | <p>✓</p> |
| <p>e. Develop public-private and nonprofit partnerships that facilitate the construction of quality affordable housing.</p> | <p>✓</p> | | |
| <p>f. Streamline the review process for high-quality, affordable housing developments that implement the goals, objectives, and policies of the General Plan.</p> | | | <p>✓</p> |
| <p>g. Minimize the intrusion of housing on prime, productive, and potentially productive agricultural lands and regionally valuable agricultural lands.</p> | <p>✓</p> | | |
| <p>h. Encourage long-term residential use of existing and future housing to meet residential needs.</p> | <p>✓</p> | | |
| <p>Implementing Actions:</p> | | | |
| <p>a. Develop policies to even out the peaks and valleys in Maui County's construction-demand cycles.</p> | | | <p>✓</p> |
| <p>Analysis: As discussed in Section III.B.2 (Housing) the MRTP will offer a mix of single and multi-family housing types. The MRTP will include affordable housing units in compliance with Chapter</p> | | | |



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| <p>2.96, MCC Residential Workforce housing Policy. Workforce homes will be subject to the requirements of Chapter 2.96, MCC to ensure the affordable homes are available for full time Maui residents.</p> <p>As discussed in section III.A.10 (Agricultural Resources) the development of the MRTP will not reduce the inventory of agriculturally significant lands. The property is rated “E” with some portions “Unclassified” under the LSB classification system. The property is “Unclassified” under the ALISH classification system, indicating that the property is not agriculturally significant.</p> | | | | |
| <p>Objective:</p> | | | | |
| <p>(4) Expand access to education related to housing options, homeownership, financing, and residential construction.</p> | | | | |
| <p>Policies:</p> | | <p>S</p> | <p>N/S</p> | <p>N/A</p> |
| <p>a. Broaden access to information about County, State, and Federal programs that provide financial assistance to renters and home buyers.</p> | | | | <p>✓</p> |
| <p>b. Expand access to information about opportunities for homeownership and self-help housing.</p> | | | | <p>✓</p> |
| <p>c. Educate residents about making housing choices that support their individual needs, the needs of their communities, and the health of the islands’ natural systems.</p> | | | | <p>✓</p> |
| <p>d. Improve home buyers’ education on all aspects of homeownership.</p> | | | | <p>✓</p> |
| <p>Analysis: The MRTP does not directly expand access to education with regard to housing options, home-ownership, financing and residential construction; therefore this objective and these policies are not applicable.</p> | | | | |
| <p>F. Strengthen the Local Economy</p> | | | | |
| <p>Goal: Maui County’s economy will be diverse, sustainable, and supportive of community values.</p> | | | | |
| <p>Objective:</p> | | | | |
| <p>(1) Promote an economic climate that will encourage diversification of the County’s economic base and a sustainable rate of economic growth.</p> | | | | |



| Policies: | S | N/S | N/A |
|--|----------|------------|------------|
| a. Support economic decisions that create long-term benefits. | ✓ | | |
| b. Promote lifelong education, career development, and technical training for existing and emerging industries. | | | ✓ |
| c. Invest in infrastructure, facilities, and programs that foster economic diversification. | ✓ | | |
| d. Support and promote locally produced products and locally owned operations and businesses that benefit local communities and meet local demand. | ✓ | | |
| e. Support programs that assist industries to retain and attract more local labor and facilitate the creation of jobs that offer a living wage. | ✓ | | |
| f. Encourage work environments that are safe, rewarding, and fulfilling to employees. | ✓ | | |
| g. Support home-based businesses that are appropriate for and in character with the community. | ✓ | | |
| h. Encourage businesses that promote the health and well-being of the residents, produce value-added products, and support community values. | ✓ | | |
| i. Foster an understanding of the role of all industries in our economy. | | | ✓ |
| j. Support efforts to improve conditions that foster economic vitality in our historic small towns. | | | ✓ |
| k. Support and encourage traditional host-culture businesses and indigenous agricultural practices. | | | ✓ |
| l. Support public and private entities that assist entrepreneurs in establishing locally operated businesses. | ✓ | | |
| Implementing Actions: | | | |
| a. Develop regulations and programs that support opportunities for local merchants, farmers, and small businesses to sell their goods and services directly to the public. | | | ✓ |
| b. Monitor the carrying capacity of the islands' social, ecological, and infrastructure systems with respect to the economy. | ✓ | | |



Analysis: The MRTP was established in the early 1980's to diversify the State's economy by encouraging research and technology based businesses to open in the Park. It has been over 25 years since the underlying zoning documents for the Park have been updated. The updated Master Plan responds to the most current trends in the development of innovation centers nationwide. The Master Plan Update will strengthen Maui's economy by making the MRTP a more attractive location for knowledge-based industries and related/supportive businesses. These industries will create a diverse range of jobs for residents, many in areas that have proven to pay substantially more than the average area wage. This will in turn benefit the rest of the economy. The result will be an increase in economic activities and employment opportunities consistent with community needs and desires, which will promote increased employment and entrepreneurial opportunities for Maui's residents.

As discussed in Section III.B.3 (Economy) the MRTP is projected to generate approximately \$1.39 billion of direct capital investment into the Maui economy and will provide an estimated 63,507 "worker years" of employment and \$2.7 billion in total wages over a 19 year absorption period. This will result in expenditures that will have a positive direct, indirect and induced impact on the County of Maui economy. During the operations phase, the MRTP will significantly increase the level of capital investment in the region which will create employment opportunities and create an economic stimulus for the region. The MRTP will provide direct employment opportunities for Maui residents and contribute to the diversification and growth of the Island's and State's economies. After "stabilization" is estimated that the Park will support 5,878 jobs with an annual payroll of about \$217 million.

Objective:

(2) Diversify and expand sustainable forms of agriculture and aquaculture.

| Policies: | S | N/S | N/A |
|---|----------|------------|------------|
| a. Support programs that position Maui County's agricultural products as premium export products. | | | ✓ |
| b. Prioritize the use of agricultural land to feed the local population, and promote the use of agricultural lands for sustainable and diversified agricultural activities. | | | ✓ |
| c. Capitalize on Hawaii's economic opportunities in the ecologically sensitive aquaculture industries. | | | ✓ |



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| d. Assist farmers to help make Maui County more self-sufficient in food production. | | | ✓ |
| e. Support ordinances, programs, and policies that keep agricultural land and water available and affordable to farmers. | | | ✓ |
| f. Support a tax structure that is conducive to the growth of the agricultural economy. | | | ✓ |
| g. Enhance County efforts to monitor and regulate important agricultural issues. | | | ✓ |
| h. Support education, research, and facilities that strengthen the agricultural industry. | | | ✓ |
| i. Maintain the genetic integrity of existing food crops. | | | ✓ |
| j. Encourage healthy and organic farm practices that contribute to land health and regeneration. | | | ✓ |
| k. Support cooperatives and other types of nontraditional and communal farming efforts. | | | ✓ |
| l. Encourage methods of monitoring and controlling genetically modified crops to prevent adverse effects. | | | ✓ |
| m. Work with the State to ease the permitting process for the revitalization of traditional fish ponds. | | | ✓ |
| Implementing Actions: | | | |
| a. Redirect efforts in the Office of Economic Development to further facilitate the development of the agricultural section and to monitor agricultural legislation and issues. | | | ✓ |
| b. Publicly identify, with signage and other means, the field locations of all genetically modified crops. | | | ✓ |
| c. Create agricultural parks in areas distant from genetically modified crops. | | | ✓ |
| <p>Analysis: As discussed in Section III.A.11 (Agricultural Resources) the development of the MRTTP will not reduce the inventory of agriculturally significant lands. The property is rated "E" with some portions "Unclassified" under the LSB classification system. The property is "Unclassified" under the ALISH classification system, indicating that the property is not agriculturally significant.</p> | | | |



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| Objective 3: | | | |
| Support a visitor industry that respects the resident culture and the environment. | | | |
| Policies: | S | N/S | N/A |
| a. Promote traditional Hawaiian practices in visitor-related facilities and activities. | | | ✓ |
| b. Encourage and educate the visitor industry to be sensitive to island lifestyles and cultural values. | | | ✓ |
| c. Encourage a spirit of welcome for residents at visitor facilities, such as by offering kama`aina incentives and discount programs. | | | ✓ |
| d. Support the renovation and enhancement of existing visitor facilities. | | | ✓ |
| e. Support policies, programs, and a tax structure that redirect the benefits of the visitor industry back into the local community. | | | ✓ |
| f. Encourage resident ownership of visitor-related businesses and facilities. | | | ✓ |
| g. Develop partnerships to provide educational and training facilities to residents employed in the visitor industry. | | | ✓ |
| h. Foster an understanding of local cultures, customs, and etiquette, and emphasize the importance of the Aloha Spirit as a common good for all. | | | ✓ |
| i. Support the diversification, development, evolution, and integration of the visitor industry in a way that is compatible with the traditional, social, economic, spiritual, and environmental values of island residents. | | | ✓ |
| j. Improve collaboration between the visitor industry and the other sectors of Maui County's economy. | | | ✓ |
| k. Perpetuate an authentic image of the Hawaiian culture and history and an appropriate recognition of the host culture. | | | ✓ |
| l. Support the programs and initiatives outlined in the Maui County Tourism Strategic Plan 2006-2015. | | | ✓ |
| m. Promote water conservation, beach conservation, and open-space conservation in areas providing services for visitors. | | | ✓ |
| n. Recognize the important contributions that the visitor industry makes to the County's economy, and support a healthy and vibrant visitor industry. | | | ✓ |
| Analysis: The MRTP is not targeting the visitor industry; however a small business hotel is a pro- | | | |



posed use in the mixed village portion of the master plan. The hotel is intended for short term occupancy for visitors conducting business within the park. Additionally transient vacation rentals, timeshares and bed and breakfast operations will be prohibited; therefore these objectives and policies are not applicable.

Objective:

(4) Expand economic sectors that increase living-wage job choices and are compatible with community values.

Policies:

S

N/S

N/A

a. Support emerging industries, including the following:

- Health and wellness industry;
- Sports and recreation industry;
- Film and entertainment industry;
- Arts and culture industry;
- Renewable-energy industry;
- Research and development industry;
- High-technology and knowledge-based industries;
- Education and training industry;
- Ecotourism industry; and
- Agritourism industry.

✓

Analysis: The MRTP was established in the early 1980's to diversify the State's economy by encouraging research and technology based businesses to open in the Park. It has been over 25 years since the underlying zoning documents for the Park have been updated. The updated Master Plan responds to the most current trends in the development of innovation centers nationwide. The Master Plan Update will strengthen Maui's economy by making the MRTP a more attractive location for knowledge-based industries and related/supportive businesses. These industries will create a diverse range of jobs for residents, many in areas that have proven to pay substantially more than the average area wage. This will in turn benefit the rest of the economy. The result will be an increase in economic activities and employment opportunities consistent with community needs and desires, which will promote increased employment and entrepreneurial opportunities for Maui's residents.

G. Improve Parks and Public Facilities



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| Goal: A full range of island-appropriate public facilities and recreational opportunities will be provided to improve the quality of life for residents and visitors. | | | |
| Objective 1: | | | |
| Expand economic sectors that increase living-wage job choices and are compatible with community values. | | | |
| Policies: | S | N/S | N/A |
| a. Protect, enhance, and expand access to public shoreline and mountain resources. | ✓ | | |
| b. Expand and enhance the network of parks, multi-use paths, and bike-ways. | ✓ | | |
| c. Assist communities in developing recreational facilities that promote physical fitness. | ✓ | | |
| d. Expand venue options for recreation and performances that enrich the lifestyles of Maui County's people. | ✓ | | |
| e. Expand affordable recreational and after-school programs for youth. | ✓ | | |
| f. Encourage and invest in recreational, social, and leisure activities that bring people together and build community pride. | ✓ | | |
| g. Promote the development and enhancement of community centers, civic spaces, and gathering places throughout our communities. | ✓ | | |
| h. Expand affordable access to recreational opportunities that support the local lifestyle. | ✓ | | |
| Implementing Actions: | | | |
| a. Identify and reserve lands for cemeteries, and preserve existing cemeteries on all islands, appropriately accommodating varying cultural and faith-based traditions. | | | ✓ |
| Analysis: the MRTP Master Plan Updte will contribute to a high quality of life for all future MRTP residents. The New Urbanism design technique will provide a complete and vibrant community with employment opportunities, a range of housing types, parks and open spaces, and a bicycle and pedestrian pathways. These elements encourage future residents to interact with each other, rely less on automobiles and enjoy the outdoors. | | | |



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| <p>As discussed in Section II.E.3 and 4 the MRTP Master Plan Update provides neighborhood parks and open spaces, a unified pedestrian and bicycle system within the Park and connections to its existing and future surroundings. The system will connect residential areas, neighborhood parks and employment areas. Additionally the MRTP is subject to the Department of Parks and Recreation Parks Assessment that requires Maui R&T Partners, LLC, to provide land or money in lieu of, for recreational and leisure space in the Kihei-Makena Community Plan region.</p> | | | |
| <p>Objective:</p> | | | |
| <p>(2) Improve the quality and adequacy of community facilities.</p> | | | |
| Policies: | S | N/S | N/A |
| a. Provide an adequate supply of dedicated shelters and facilities for disaster relief. | | | ✓ |
| b. Provide and maintain community facilities that are appropriately designed to reflect the traditions and customs of local cultures. | ✓ | | |
| c. Ensure that parks and public facilities are safe and adequately equipped for the needs of all ages and physical abilities to the extent reasonable. | ✓ | | |
| d. Maintain, enhance, expand, and provide new active and passive recreational facilities in ways that preserve the natural beauty of their locations. | ✓ | | |
| e. Redesign or retrofit public facilities to adapt to major shifts in environmental or urban conditions to the extent reasonable. | | | ✓ |
| <p>Analysis: The MRTP's open spaces, parks and bicycle and pedestrian network will provide a variety of recreational options that provide recreational benefit and that preserve the natural environment to create an enhanced community.</p> | | | |
| <p>Objective:</p> | | | |
| <p>(3) Enhance the funding, management, and planning of public facilities and park lands.</p> | | | |
| Policies: | S | N/S | N/A |
| a. Identify and encourage the establishment of regulated and environmentally sound campgrounds. | | | ✓ |
| b. Manage park use and control access to natural resources in order to | | | ✓ |



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| rest sensitive places and utilize the resources in a sustainable manner. | | | |
| c. Provide public-recreational facilities that are clean and well-maintained. | ✓ | | |
| d. Develop partnerships to ensure proper stewardship of the islands' trails, public lands, and access systems. | | | ✓ |
| e. Ensure that there is an adequate supply of public restrooms in convenient locations. | | | ✓ |
| Implementing Actions: | | | |
| a. Encourage the State to allow for overnight fishing along the shoreline in accordance with management plans and regulations. | | | ✓ |
| b. Develop and regularly update functional plans, including those relating to public facilities, parks, and campgrounds. | | | ✓ |
| c. Develop and adopt local level-of-service standards for public facilities and parks. | | | ✓ |
| d. Identify, acquire, and develop lands for parks, civic spaces, and public uses. | ✓ | | |
| <p>Analysis: As discussed in Section II. D (Proposed Action) the MRTP Master Plan Update provides neighborhood parks and open spaces, a unified pedestrian and bicycle system within the Park and connections to its existing and future surroundings. The system will connect residential areas, neighborhood parks and employment areas. Additionally the MRTP is subject to the Department of Parks and Recreation Parks Assessment that requires Maui R&T Partners, LLC, to provide land or money in lieu of, for recreational and leisure space in the Kihei-Makena Community Plan region.</p> | | | |
| <u>H. Diversify Transportation Options</u> | | | |
| <p>Goal: Maui County will have an efficient, economical, and environmentally sensitive means of moving people and goods.</p> | | | |
| Objective: | | | |
| (1) Provide an effective, affordable, and convenient ground-transportation system that is environmentally sustainable. | | | |
| Policies: | S | N/S | N/A |
| a. Execute planning strategies to reduce traffic congestion. | ✓ | | |



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| b. Plan for the efficient relocation of roadways for the public benefit. | | | |
| c. Support the use of alternative roadway designs, such as traffic-calming techniques and modern roundabouts. | ✓ | | |
| d. Increase route and mode options in the ground-transportation network. | ✓ | | |
| e. Ensure that roadway systems are safe, efficient, and maintained in good condition. | ✓ | | |
| f. Preserve roadway corridors that have historic, scenic, or unique physical attributes that enhance the character and scenic resources of communities. | | | ✓ |
| g. Design new roads and roadway improvements to retain and enhance the existing character and scenic resources of the communities through which they pass. | ✓ | | |
| h. Promote a variety of affordable and convenient transportation services that meet countywide and community needs and expand ridership of transit systems. | ✓ | | |
| i. Collaborate with transit agencies, government agencies, employers, and operators to provide planning strategies that reduce peak-hour traffic. | ✓ | | |
| j. Develop and expand an attractive, island-appropriate, and efficient public-transportation system. | | | ✓ |
| k. Provide and encourage the development of specialized transportation options for the young, the elderly, and persons with disabilities. | | | ✓ |
| l. Evaluate all alternatives to preserve quality of life before widening roads. | | | ✓ |
| m. Encourage businesses in the promotion of alternative transportation options for resident and visitor use. | ✓ | | |
| n. Support the development of carbon-emission standards and an incentive program aimed at achieving County carbon-emission goals. | | | ✓ |
| Implementing Actions: | | | |
| a. Create incentives and implement strategies to reduce visitor dependence on rental cars. | | | ✓ |
| b. Establish efficient public-transit routes between employment centers | ✓ | | |



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| and primary workforce residential areas. | | | |
| c. Create attractive, island-appropriate, conveniently located park-and-ride and ride-share facilities. | ✓ | | |
| <p>Analysis: The MRTP's non-vehicular transportation strategy includes: 1) compact and mixed-use development patterns, 2) pedestrian oriented streets integrating street trees, sidewalks, and traffic calming, 3) both striped and separated bike lanes in appropriate locations, 4) a network of greenways and parkways to facilitate mobility, and 5) providing connectivity to adjacent developments, such as the Kihei High School and uses makai of Piilani Highway. The Plan also includes transportation demand management measures, including: 1) encouraging alternate work schedules and off peak hours for employment generators, and 2) supporting park and ride, ridesharing, carpooling and van pooling, regional and sub-regional shuttles.</p> | | | |
| Objective: | | | |
| (2) Reduce the reliance on the automobile and fossil fuels by encouraging walking, bicycling, and other energy-efficient and safe alternative modes of transportation. | | | |
| Policies: | S | N/S | N/A |
| a. Make walking and bicycling transportation safe and easy between and within communities. | ✓ | | |
| b. Require development to be designed with the pedestrian in mind. | ✓ | | |
| c. Design new and retrofit existing rights-of-way with adequate sidewalks, bicycle lanes, or separated multi-use transit corridors. | ✓ | | |
| d. Support the development of a countywide network of bikeways, equestrian trails, and pedestrian paths. | ✓ | | |
| e. Support the reestablishment of traditional trails between communities, to the ocean, and through the mountains for public use. | ✓ | | |
| f. Encourage educational programs to increase safety for pedestrians and bicyclists. | | | ✓ |
| Implementing Actions: | | | |
| a. Design, build, and modify existing bikeways to improve safety and separation from automobiles. | | | ✓ |



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| b. Increase enforcement to reduce abuse of bicycle and pedestrian lanes by motorized vehicles. | | | ✓ |
| c. Identify non-motorized transportation options as a priority for new sources of funding. | | | ✓ |
| <p>Analysis: The MRTP's non-vehicular transportation strategy includes: 1) compact and mixed-use development patterns, 2) pedestrian oriented streets integrating street trees, sidewalks, and traffic calming, 3) both striped and separated bike lanes in appropriate locations, 4) a network of greenways and parkways to facilitate mobility, and 5) providing connectivity to adjacent developments, such as the Kihei High School and uses makai of Piilani Highway. The Plan also includes transportation demand management measures, including: 1) encouraging alternate work schedules and off peak hours for employment generators, and 2) supporting park and ride, ridesharing, carpooling and van pooling, regional and sub-regional shuttles.</p> | | | |
| Objective: | | | |
| (3) Improve opportunities for affordable, efficient, safe, and reliable air transportation. | | | |
| Policies: | S | N/S | N/A |
| a. Discourage private helicopter and fixed-wing landing sites to mitigate environmental and social impacts. | | | ✓ |
| b. Encourage the use of quieter aircraft and noise-abatement procedures for arrivals and departures. | | | ✓ |
| c. Encourage the modernization and maintenance of air-transportation facilities for general-aviation activities. | | | ✓ |
| d. Encourage a viable and competitive atmosphere for air carriers to expand service and ensure sufficient intra-County flights and affordable fares for consumers. | | | ✓ |
| e. Continue to support secondary airports, and encourage the State to provide them with adequate funding. | | | ✓ |
| f. During Community Plan updates, explore the use of the smaller airports. | | | ✓ |



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| g. Encourage the State to provide efficient, adequate, and affordable parking and transit connections within and around airports. | | | ✓ |
| Analysis: The MRTP does not include facilities for air transportation; therefore, this objective and these policies are not applicable. | | | |
| Objective: | | | |
| (4) Improve opportunities for affordable, efficient, safe, and reliable ocean transportation. | | | |
| Policies: | S | N/S | N/A |
| a. Support programs and regulations that reduce the disposal of maritime waste and prevent spills into the ocean. | | | ✓ |
| b. Encourage the upgrading of harbors to resist damage from natural hazards and disasters. | | | ✓ |
| c. Encourage the State to study the use of existing harbors and set priorities for future use. | | | ✓ |
| d. Explore all options to protect the traditional recreational uses of harbors, and mitigate harbor-upgrade impacts to recreational uses where feasible. | | | ✓ |
| e. Encourage the upgrading of harbors and the separation of cargo and bulk materials from passenger and recreational uses. | | | ✓ |
| f. Encourage the State to provide for improved capacity at shipping, docking, and storage facilities. | | | ✓ |
| g. Encourage the State to provide adequate parking facilities and transit connections within and around harbor areas. | | | ✓ |
| h. Encourage the redevelopment and revitalization of harbors while preserving historic and cultural assets in harbor districts. | | | ✓ |
| i. Encourage the State to provide adequate facilities for small-boat operations, including small-boat launch ramps, according to community needs. | | | ✓ |
| j. Support the maintenance and cleanliness of harbor facilities. | | | ✓ |
| k. Support the redevelopment of harbors as pedestrian-oriented gathering places. | | | ✓ |
| Analysis: The MRTP is not located on the coastline and does not include facilities for ocean transportation; therefore, this objective and these policies regarding ocean transportation are not applicable. | | | |



| | | | |
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| Objective: | | | |
| (5) Improve and expand the planning and management of transportation systems. | | | |
| Policies: | S | N/S | N/A |
| a. Encourage progressive community design and development that will reduce transportation trips. | ✓ | | |
| b. Require new developments to contribute their <i>pro rata</i> share of local and regional infrastructure costs. | ✓ | | |
| c. Establish appropriate user fees for private enterprises that utilize public-transportation facilities for recreational purposes. | | | ✓ |
| d. Support the revision of roadway-design criteria and standards so that roads are compatible with surrounding neighborhoods and the character of rural areas. | | | ✓ |
| e. Plan for multi-modal transportation and utility corridors on each island. | | | ✓ |
| f. Support designing all transportation facilities, including airport, harbor, and mass-transit stations, to reflect Hawaiian architecture. | | | ✓ |
| g. Utilize transportation-demand management as an integral part of transportation planning. | ✓ | | |
| h. Accommodate the planting of street trees and other appropriate landscaping in all public rights-of-way. | ✓ | | |
| <p>Analysis: The MRTP's non-vehicular transportation strategy includes: 1) compact and mixed-use development patterns, 2) pedestrian oriented streets integrating street trees, sidewalks, and traffic calming, 3) both striped and separated bike lanes in appropriate locations, 4) a network of greenways and parkways to facilitate mobility, and 5) providing connectivity to adjacent developments, such as the Kihei High School and uses makai of Piilani Highway. The Plan also includes transportation demand management measures, including: 1) encouraging alternate work schedules and off peak hours for employment generators, and 2) supporting park and ride, ridesharing, carpooling and van pooling, regional and sub-regional shuttles.</p> <p>In addition, development of the project will require pro-rata contributions to infrastructure improvements to mitigate the increase in traffic caused by the development.</p> | | | |



I. Improve Physical Infrastructure

Goal: Maui County’s physical infrastructure will be maintained in optimum condition and will provide for and effectively serve the needs of the County through clean and sustainable technologies.

Objective:

(1) Improve water systems to assure access to sustainable, clean, reliable, and affordable sources of water.

| Policies: | S | N/S | N/A |
|---|----------|------------|------------|
| a. Ensure that adequate supplies of water are available prior to approval of subdivision or construction documents. | ✓ | | |
| b. Develop and fund improved water-delivery systems. | ✓ | | |
| c. Ensure a reliable and affordable supply of water for productive agricultural uses. | | | ✓ |
| d. Promote the reclamation of gray water, and enable the use of reclaimed, gray, and brackish water for activities that do not require potable water. | ✓ | | |
| e. Retain and expand public control and ownership of water resources and delivery systems. | | | ✓ |
| f. Improve the management of water systems so that surface-water and groundwater resources are not degraded by overuse or pollution. | ✓ | | |
| g. Explore and promote alternative water-source-development methods. | ✓ | | |
| h. Seek reliable long-term sources of water to serve developments that achieve consistency with the appropriate Community Plans. | ✓ | | |

Implementing Actions:

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| a. Develop a process to review all applications for desalination. | | | ✓ |
|---|--|--|---|

Analysis: As discussed in Section III.D.4 (Water) the MRTP’s preferred source of ~~potable~~ drinking water is water supplied by the County Department of Water Supply (DWS) and the preferred source of non-~~potable~~ drinking water is reclaimed water from the KWWRF. However, current County water policy prohibits the DWS from allocating water to a future subdivision, and yet a dedicated source of water is required for subdivision approval. In response, the Maui R&T Partners



will, if necessary, develop and treat on-site brackish well water to meet its ~~potable~~ drinking water demand and any non-~~potable~~ drinking water demand that cannot be supplied by the KWWRF.

In addition to developing its own on-site water source, Maui R&T Partners is committed to water conservation strategies to reduce consumption, conserve resources and minimize water demands, and it will implement water conservation recommendations of the County of Maui Department of Water Supply.

Objective:

(2) Improve waste-disposal practices and systems to be efficient, safe, and as environmentally sound as possible.

| Policies: | S | N/S | N/A |
|---|----------|------------|------------|
| a. Provide sustainable waste-disposal systems and comprehensive, convenient recycling programs to reduce the flow of waste into landfills. | ✓ | | |
| b. Support innovative and alternative practices in recycling solid waste and wastewater and disposing of hazardous waste. | | | ✓ |
| c. Encourage vendors and owners of automobile, appliance, and white goods to participate in the safe disposal and recycling of such goods, and ensure greater accountability for large waste producers. | | | ✓ |
| d. Develop strategies to promote public awareness to reduce pollution and litter, and encourage residents to reduce, reuse, recycle, and compost waste materials. | | | ✓ |
| e. Pursue improvements and upgrades to existing wastewater and solid-waste systems consistent with current and future plans and the County's Capital Improvement Program. | | | ✓ |

Analysis: As described in Section III.C.5 (Solid Waste) after full build-out and occupancy of all residential units and commercial units at the project site, total waste generated is estimated to be approximately 11,653 tons per year. Using the County's waste diversion rate of 30 percent, total waste from the project site is estimated to be approximately 8,157 tons per year. Achieving the County's waste diversion rate of 50 percent by 2030 would reduce the Project's waste to 5,827 tons per year.

The MRTP Master Plan Update will support the County's recycling, reuse, and composting activities. The County of Maui Integrated Solid Waste Management Plan (2009) provides strategies for divert-



ing solid waste from landfills to reduce landfill dependency, save landfill capacity and improve operational efficiency. The MRTP will implement these strategies by providing options for recycling, such as collection systems and bin space, within the Park, and promoting sound recycling practices among residents and businesses.

Objective:

(3) Significantly increase the use of renewable and green technologies to promote energy efficiency and energy self-sufficiency.

| Policies: | S | N/S | N/A |
|---|----------|------------|------------|
| a. Promote the use of local renewable energy sources, and reward energy efficiency. | | | ✓ |
| b. Consider tax incentives and credits for the development of sustainable- and renewable-energy sources. | | | ✓ |
| c. Expand education about energy conservation and self-sufficiency. | | | ✓ |
| d. Encourage small-scale energy generation that utilizes wind, sun, water, biowaste, and other renewable sources of energy. | ✓ | | |
| e. Expand renewable-energy production. | | | ✓ |
| f. Develop public-private partnerships to ensure the use of renewable energy and increase energy efficiency. | | | ✓ |
| g. Require the incorporation of locally appropriate energy-saving and green building design concepts in all new developments by providing energy-efficient urban design guidelines and amendments to the Building Code. | ✓ | | |
| h. Encourage the use of sustainable energy to power vehicles. | | | ✓ |
| i. Promote the retrofitting of existing buildings and new development to incorporate energy-saving design concepts and devices. | ✓ | | |
| j. Encourage green footprint practices. | ✓ | | |
| k. Reduce Maui County's dependence on fossil fuels and energy imports. | ✓ | | |
| l. Support green building practices such as the construction of buildings that aim to minimize carbon dioxide production, produce renewable energy, and recycle water. | ✓ | | |
| m. Promote and support environmentally friendly practices in all en- | ✓ | | |



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| ergy sectors. | | | |
| Implementing Actions: | | | |
| a. Adopt an energy-efficiency policy for Maui County government as a model for other jurisdictions. | | | ✓ |
| b. Adopt a Green Building Code, and support green building practices. | | | ✓ |
| <p>Analysis: Because of the efficient and compact mixed-use settlement pattern proposed in the Master Plan Update, considerable energy savings will be realized through a reduction in vehicle miles travelled. In addition, several existing Park tenants have installed roof mounted solar photovoltaic systems to reduce or eliminate their energy demand. Future Park tenants will be encouraged to install similar systems. In additions, future developers within the Park will be encouraged to utilize energy efficient building materials, take advantage of natural lighting and cooling opportunities, and install energy efficient cooling systems and appliances. Future housing developers will be required to install solar hot water heating.</p> | | | |
| Objective: | | | |
| (4) Direct growth in a way that makes efficient use of existing infrastructure and to areas where there is available infrastructure capacity. | | | |
| Policies: | S | N/S | N/A |
| a. Capitalize on existing infrastructure capacity as a priority over infrastructure expansion. | ✓ | | |
| b. Planning for new towns should only be considered if a region's growth is too large to be directed into infill and adjacent growth areas. | | | ✓ |
| c. Utilize appropriate infrastructure technologies in the appropriate locations. | ✓ | | |
| d. Promote land use patterns that can be provided with infrastructure and public facilities in a cost-effective manner. | ✓ | | |
| e. Support catchment systems and on-site wastewater treatment in rural areas and aggregated water and wastewater systems in urban areas if they are appropriately located. | ✓ | | |
| Implementing Actions: | | | |



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| a. Develop a streamlining system for urban infill projects. | | | ✓ |
| b. Identify appropriate areas for urban expansion of existing towns where infrastructure and public facilities can be provided in a cost-effective manner. | ✓ | | |
| <p>Analysis: The Project will be developed in accordance with nationally recognized smart growth and New Urbanism town planning principles. The Project is located within and around the existing urban designated and developed MRTTP. Implementation of the Master Plan Update will bring additional employment to South Maui, which will be accommodated in a manner that offers jobs close to a diversity of housing, professional and businesses services, retail, and civic and park uses. The Park's close proximity to Central Kihei, brings Park residents into easy commuting distance of the region's multitude of public facility systems, including schools, police, fire, and park and recreation facilities. The Project site is also proximate to the region's wastewater treatment plan, reclaimed water distribution system, and existing State and County roadways.</p> | | | |
| Objective: | | | |
| (5) Improve the planning and management of infrastructure systems. | | | |
| Policies: | S | N/S | N/A |
| a. Provide a reliable and sufficient level of funding to enhance and maintain infrastructure systems. | ✓ | | |
| b. Require new developments to contribute their <i>pro rata</i> share of local and regional infrastructure costs. | ✓ | | |
| c. Improve coordination among infrastructure providers and planning agencies to minimize construction impacts. | | | ✓ |
| d. Maintain inventories of infrastructure capacity, and project future infrastructure needs. | ✓ | | |
| e. Require social-justice and -equity issues to be considered during the infrastructure-planning process. | | | ✓ |
| f. Discourage the development of critical infrastructure systems within hazard zones and the tsunami-inundation zone to the extent practical. | | | ✓ |
| g. Ensure that infrastructure is built concurrent with or prior to development. | ✓ | | |
| h. Ensure that basic infrastructure needs can be met during a disaster. | ✓ | | |



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| i. Locate public facilities and emergency services in appropriate locations that support the health, safety, and welfare of each community and that minimize delivery inefficiencies. | ✓ | | |
| j. Promote the undergrounding of utility and other distribution lines for health, safety, and aesthetic reasons. | ✓ | | |
| Implementing Actions: | | | |
| a. Develop and regularly update functional plans for infrastructure systems. | | | ✓ |
| b. Develop, adopt, and regularly update local or community-sensitive level-of-service standards for infrastructure systems. | | | ✓ |
| Analysis: The implementation of the Master Plan Update will increase demand for public infrastructure and facility systems. In response, mitigative measures will be implemented to address the impacts. For example, the Park will make land available for schools, parks, and other necessary public facilities. In addition, the Park will contribute off-site infrastructure improvements as warranted. The Park will also pay required impact fees for infrastructure and public facility systems, as law requires. | | | |
| <u>J. Promote Sustainable Land Use and Growth Management</u> | | | |
| Goal: Community character, lifestyles, economies, and natural assets will be preserved by managing growth and using land in a sustainable manner. | | | |
| Objective: | | | |
| (1) Improve land use management and implement a directed-growth strategy. | | | |
| Policies: | S | N/S | N/A |
| a. Establish, map, and enforce urban- and rural-growth limits. | | | ✓ |
| b. Direct urban and rural growth to designated areas. | ✓ | | |
| c. Limit the number of visitor-accommodation units and facilities in Community Plan Areas. | | | ✓ |
| d. Maintain a sustainable balance between the resident, part-time resident, and visitor populations. | ✓ | | |
| e. Encourage redevelopment and infill in existing communities on lands intended for urban use to protect productive farm land and open-space resources. | ✓ | | |
| f. Discourage new entitlements for residential, resort, or commercial development along the shoreline. | | | ✓ |



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| g. Restrict development in areas that are prone to natural hazards, disasters, or sea-level rise. | | | ✓ |
| h. Direct new development in and around communities with existing infrastructure and service capacity, and protect natural, scenic, shoreline, and cultural resources. | ✓ | | |
| i. Establish and maintain permanent open space between communities to protect each community's identity. | ✓ | | |
| j. Support the dedication of land for public uses. | ✓ | | |
| k. Preserve the public's rights of access to and continuous lateral access along all shorelines. | | | ✓ |
| l. Enable existing and future communities to be self-sufficient through sustainable land use planning and management practices. | ✓ | | |
| m. Protect summits, slopes, and ridgelines from inappropriate development. | | | ✓ |
| Implementing Actions: | | | |
| a. Regularly update urban- and rural-growth boundaries and their maps. | | | ✓ |
| b. Establish transfer and purchase of development rights programs. | | | ✓ |
| c. Develop and adopt a green infrastructure plan. | | | ✓ |
| d. Develop studies to help determine a sustainable social, environmental, and economic carrying capacity for each island. | | | ✓ |
| e. Identify and define resort-destination areas. | | | ✓ |
| Analysis: The proposed development is located entirely within the Draft Maui Island Plan's Urban Growth Boundary and it is entirely within the Kihei-Makena Community Plan's urban designation "Project District 6" (R&T Park). The Project site is in a location that is proximate to infrastructure and public facilities and existing employment. The Project site is not located within an area that is subject to natural hazards and no critical wildlife habitats are on the property. | | | |
| Objective: | | | |
| (2) Improve planning for and management of agricultural lands and rural areas. | | | |
| Policies: | | | |
| | S | N/S | N/A |
| a. Protect prime, productive, and potentially productive agricultural lands to maintain the islands' agricultural and rural identities and economies. | | | ✓ |



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| b. Provide opportunities and incentives for self-sufficient and subsistence homesteads and farms. | | | ✓ |
| c. Discourage developing or subdividing agriculturally designated lands when non-agricultural activities would be primary uses. | | | ✓ |
| d. Conduct agricultural-development planning to facilitate robust and sustainable agricultural activities. | | | ✓ |
| Implementing Actions: | | | |
| a. Inventory and protect prime, productive, and potentially productive agricultural lands from competing non-agricultural land uses. | | | ✓ |
| Analysis: As discussed in Section III.A.11 (Agricultural Resources) the development of the MRTP will not reduce the inventory of agriculturally significant lands. The property is rated “E” with some portions “Unclassified” under the LSB classification system. The property is “Unclassified” under the ALISH classification system, indicating that the property is not agriculturally significant. In addition, the project site is within an area that is planned for future urban development. | | | |
| Objective: | | | |
| (3) Design all developments to be in harmony with the environment and to protect each community’s sense of place. | | | |
| Policies: | S | N/S | N/A |
| a. Support and provide incentives for green building practices. | ✓ | | |
| b. Encourage the incorporation of green building practices and technologies into all government facilities to the extent practicable. | | | ✓ |
| c. Protect and enhance the unique architectural and landscape characteristics of each Community Plan Area, small town, and neighborhood. | ✓ | | |
| d. Ensure that adequate recreational areas, open spaces, and public-gathering places are provided and maintained in all urban centers and neighborhoods. | ✓ | | |
| e. Ensure business districts are distinctive, attractive, and pedestrian-friendly destinations. | ✓ | | |
| f. Use trees and other forms of landscaping along rights-of-way and within parking lots to provide shade, beauty, urban-heat reduction, and separation of pedestrians from automobile traffic in accordance with community desires. | ✓ | | |
| g. Where appropriate, integrate public-transit, equestrian, pedestrian, and bicycle facilities, and public rights-of-way as design elements in new and existing communities. | ✓ | | |



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| h. Ensure better connectivity and linkages between land uses. | ✓ | | |
| i. Adequately buffer and mitigate noise and air pollution in mixed-use areas to maintain residential quality of life. | ✓ | | |
| j. Protect rural communities and traditional small towns by regulating the footprint, locations, site planning, and design of structures. | ✓ | | |
| k. Support small-town revitalization and preservation. | | | ✓ |
| l. Facilitate safe pedestrian access, and create linkages between destinations and within parking areas. | ✓ | | |
| Implementing Actions: | | | |
| a. Establish design guidelines and standards to enhance urban and rural environments. | ✓ | | |
| b. Provide funding for civic-center and civic-space developments. | | | ✓ |
| c. Establish and enhance urban forests in neighborhoods and business districts. | | | ✓ |
| Analysis: In accordance with the above polices and actions, the Project will encourage the use of green building practices for both employment and residential uses; incorporate bicycle and pedestrian infrastructure throughout; utilize street trees for beautification, heat reduction, and traffic calming; and will ensure better connectivity and linkages between land uses than what is possible through traditional suburban development practices. | | | |
| Objective: | | | |
| (4) Improve and increase efficiency in land use planning and management. | | | |
| Policies: | S | N/S | N/A |
| a. Assess the cumulative impact of developments on natural ecosystems, natural resources, wildlife habitat, and surrounding uses. | ✓ | | |
| b. Ensure that new development projects requiring discretionary permits demonstrate a community need, show consistency with the General Plan, and provide an analysis of impacts. | ✓ | | |
| c. Encourage public and private partnerships to preserve lands of importance, develop housing, and meet the needs of residents. | ✓ | | |
| d. Promote creative subdivision designs that implement best practices in land development, sustainable management of natural and physical resources, increased pedestrian and bicycle functionality and safety, and the principles of livable communities. | ✓ | | |



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| e. Coordinate with Federal, State, and County officials in order to ensure that land use decisions are consistent with County plans and the vision local populations have for their communities. | ✓ | | |
| f. Enable greater public participation in the review of subdivisions. | | | ✓ |
| g. Improve land use decision making through the use of land- and geographic-information systems. | | | ✓ |
| Implementing Actions: | | | |
| A. Institute a time limit and sunseting stipulations on development entitlements and their implementation. | | | ✓ |
| Analysis: During the preparation of the Master Plan Update, a site analysis was conducted to ensure that urban development would mitigate impacts to the natural and cultural environment. The subject project is consistent with the County's General Plan. The subject EIS assesses the cumulative impact of the development and its potential impacts to natural ecosystems, natural resources, wildlife habitat and surrounding land uses. | | | |
| <u>K. Strive for Good Governance</u> | | | |
| Goal: | | | |
| Objective: | | | |
| (1) Strengthen governmental planning, coordination, consensus building, and decision making. | | | |
| Policies: | S | N/S | N/A |
| a. Plan and prepare for the effects of social, demographic, economic, and environmental shifts. | | | ✓ |
| b. Plan for and address the possible implications of Hawaiian sovereignty. | | | ✓ |
| c. Encourage collaboration among government agencies to reduce duplication of efforts and promote information availability and exchange. | | | ✓ |
| d. Expand opportunities for the County to be involved in and affect State and Federal decision making. | | | ✓ |
| e. Plan and prepare for large-scale emergencies and contingencies. | | | ✓ |
| f. Improve public awareness about preparing for natural hazards, disasters, and evacuation plans. | | | ✓ |
| g. Improve coordination among Federal, State, and County agencies. | | | ✓ |



| Implementing Actions: | | | |
|---|----------|------------|------------|
| a. Develop policies, regulations, and programs to protect and enhance the unique character and needs of the County's various communities. | | | ✓ |
| b. Evaluate and, if necessary, recommend modifications to the County Charter that could result in a possible change to the form of governance for Maui County. | | | ✓ |
| c. Study and evaluate the feasibility and implications of district voting in Maui County Council elections. | | | ✓ |
| d. Study and evaluate the feasibility of authorizing town governments in Maui County. | | | ✓ |
| Analysis: The MRTP will not directly develop government services; therefore this objective and these policies are not applicable. However, the MRTP build out will have a significant positive impact on the Maui County economy and will contribute to increased County revenues in the form of increased property taxes, general excise taxes, and income taxes. | | | |
| Objective: | | | |
| (2) Promote civic engagement. | | | |
| Policies: | S | N/S | N/A |
| a. Foster consensus building through in-depth, innovative, and accessible public-participatory processes. | ✓ | | |
| b. Promote and ensure public participation and equal access to government among all citizens. | | | ✓ |
| c. Encourage a broad cross-section of residents to volunteer on boards and commissions. | | | ✓ |
| d. Encourage the State to improve its community-involvement processes. | | | ✓ |
| e. Support community-based decision making. | | | ✓ |
| f. Expand advisory functions at the community level. | | | ✓ |
| g. Expand opportunities for all members of the public to participate in public meetings and forums. | ✓ | | |
| h. Facilitate the community's ability to obtain relevant documentation. | ✓ | | |



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| i. Increase voter registration and turnout. | | | ✓ |
| Implementing Actions: | | | |
| a. Implement two-way communication using audio-visual technology that allows residents to participate in the County’s planning processes. | | | ✓ |
| b. Ensure and expand the use of online notification of County business and public meetings, and ensure the posting of all County board and commission meeting minutes. | | | ✓ |
| c. Explore funding mechanisms to improve participation by volunteers on boards and commissions. | | | ✓ |
| d. Develop a project-review process that mandates early and ongoing consultation in and with communities affected by planning and land use activities. | | | ✓ |
| <p>Analysis: The public participation program involved numerous participatory meetings with key stakeholders, community groups, neighboring property owners and governmental agencies at various stages of the master planning process. These meetings provided opportunity for the public to ask questions and present concerns about the project prior to the submittal of the <u>FEIS</u>.</p> <p>Further review of the MRTP will include review of this <u>FEIS</u> and land use entitlement change application by the State Land Use Commission, Maui Planning Commission and Maui County Council. These steps provide for agency and public input and comments, as well as opportunities for the public and decision makers to ask for more information to address any additional concerns that may arise.</p> | | | |
| Objective: | | | |
| (3) Improve the efficiency, reliability, and transparency of County government’s internal processes and decision making. | | | |
| Policies: | S | N/S | N/A |
| a. Use advanced technology to improve efficiency. | | | ✓ |
| b. Simplify and clarify the permitting process to provide uniformity, reliability, efficiency, and transparency. | | | ✓ |
| c. Improve communication with Lana`i and Moloka`i through the expanded use of information technologies, expanded staffing, and the creation and expansion of government-service centers. | | | ✓ |
| d. Ensure that laws, policies, and regulations are internally consistent and effectuate the intent of the General Plan. | | | ✓ |
| Implementing Actions: | | | |



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| a. Update the County Code to be consistent with the General Plan. | | | ✓ |
| b. Identify and update County regulations and procedures to increase the productivity and efficiency of County government. | | | ✓ |
| c. Develop local level-of-service standards for infrastructure, public facilities, and services. | | | ✓ |
| d. Implement plans through programs, regulations, and capital improvements in a timely manner. | | | ✓ |
| e. Expand government online services. | | | ✓ |
| Analysis: The MRTP will not directly improve government processes, decision making and standards; therefore this objective and these policies are not applicable. However, the MRTP build out will have a significant positive impact on the Maui County economy and will contribute to increased County revenues in the form of increased property taxes, general excise taxes, and income taxes. | | | |
| Objective: | | | |
| (4) Adequately fund in order to effectively administer, implement, and enforce the General Plan. | | | |
| Policies: | S | N/S | N/A |
| a. Adequately fund, staff, and support the timely update and implementation of planning policy, programs, functional plans, and enforcement activities. | | | ✓ |
| b. Ensure that the County's General Plan process provides for efficient planning at the County, island, town, and neighborhood level. | | | ✓ |
| c. Encourage ongoing professional development, education, and training of County employees. | | | ✓ |
| d. Encourage competitive compensation packages for County employees to attract and retain County personnel. | | | ✓ |
| e. Enable the County government to be more responsive in implementing our General Plan and Community Plans. | | | ✓ |
| f. Review discretionary permits for compliance with the Countywide Policy Plan. | | | ✓ |
| g. Strengthen the enforcement of County, State, and Federal land use laws. | | | ✓ |
| Implementing Actions: | | | |
| a. Establish penalties to ensure compliance with County, State, and Federal land use laws. | | | ✓ |
| Analysis: The MRTP will not directly improve government administration, programs, or plans; therefore this objective and these policies are not applicable. However, the MRTP build out will have | | | |



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| a significant positive impact on the Maui County economy and will contribute to increased County revenues in the form of increased property taxes, general excise taxes, and income taxes, a portion of which could be used to help fund implementation of the General Plan. | | | |
| Objective 5: | | | |
| Strive for County government to be a role model for implementing cultural and environmental policies and practices. | | | |
| Policies: | S | N/S | N/A |
| a. Educate residents on the benefits of sustainable practices. | | | ✓ |
| b. Encourage the retention and hiring of qualified professionals who can improve cultural and environmental practices. | | | ✓ |
| c. Incorporate environmentally sound and culturally appropriate practices in government operations and services. | | | ✓ |
| d. Encourage all vendors with County contracts to incorporate environmentally sound and culturally appropriate practices. | | | ✓ |
| Analysis: The MRTP will not directly improve government policies and practices; therefore this objective and these policies are not applicable. However, the MRTP build out will have a significant positive impact on the Maui County economy and will contribute to increased County revenues in the form of increased property taxes, general excise taxes, and income taxes. | | | |

2. Maui Island Plan

The Maui Island Plan serves as the regional plan for the Island of Maui. The Plan is comprised of the following ten elements: 1) Population; 2) Heritage Resources; 3) Natural Hazards; 4) Economic Development; 5) Housing; 6) Infrastructure and Public Facilities; 7) Land Use; 8) Directed Growth Plan; 9) Long Range Implementation Plan; and 10) Monitoring and Evaluation. Each element contains goals, objectives, policies and implementing actions. The Directed Growth Plan identifies the location of future development through 2030. The Directed Growth Plan is intended to guide the location and general character of future urban development and will direct future zoning changes and guide the development of the County’s short-term and long-term capital improvement plan budgets.

The General Plan of the County of Maui refers to a hierarchy of planning documents that together set forth future growth and policy direction in the County. The General



Plan is comprised of the following documents: 1) County-wide Policy Plan; 2) Maui Island Plan; and 3) nine community plans.

The County-wide Policy Plan was adopted in March 2010 and is a broad policy document that identifies a vision for the future of Maui County. It establishes a set of guiding principles and provides comprehensive goals, objectives, policies and implementing actions that portray the desired direction of the County's future. The County-wide Policy Plan provides the policy framework for the development of the Maui Island Plan and nine Community Plans.

The Maui Island Plan functions as a regional plan and addresses the policies and issues that are not confined to just one community plan area, including regional systems such as transportation, utilities and growth management, for the Island of Maui. Together, the Island and Community Plans develop strategies with respect to population density, land use maps, land use regulations, transportation systems, public and community facility locations, water and sewage systems, visitor destinations, urban design and other matters related to development. The draft Maui Island Plan is currently under review by the County Council.

~~Once the~~ The Maui Island Plan is approved it will be used to guide the growth and development of Maui County. The Plan notes that the visitor industry and MRTP are major job generators in the Kihei region and urban expansion of the MRTP is appropriate. As indicated by the ~~Planning Department's proposed~~ Plan's Directed Growth Maps, the MRTP lies within the limits of the proposed Urban Growth Boundary for Kihei. See: Figure No. 13).

The FEIS will discuss portions of Chapters 4 and 7 of the ~~Draft~~ Maui Island Plan that are applicable to the Master Plan Update and development of the MRTP.

Chapter 4 Economic Development

| | | | |
|---|---|-----|-----|
| Draft Maui Island Plan | S | N/S | N/A |
| Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable | | | |
| Economic Development | | | |



| | | | |
|--|---|-----|-----|
| Economic Diversification | | | |
| Goal: A sustainable, diversified economy that provides full employment and a living wage. Maui will have a balanced economy composed of a variety of industries that offer employment opportunities and well-paying jobs and a business environment that is sensitive to resident needs and the island's unique natural and cultural resources. | | | |
| Objective: | S | N/S | N/A |
| Objective 4.1.1: A more diversified economy. | ✓ | | |
| Policies: | S | N/S | N/A |
| Policy 4.1.1.a: Encourage an economy that is driven by innovation, research and development, and human resource development <u>including but not limited to, increasing technology- and knowledge-based sectors to be a major component in Maui County's economic base.</u> | ✓ | | |
| Policy 4.1.1.b: Support the creation of new jobs and industries that provide a living wage. | ✓ | | |
| Policy 4.1.1.c: Develop linkages and partnerships among international research and development activities and Maui businesses. <u>Facilitate and expedite permits and approvals.</u> | ✓ | | |
| Policy 4.1.1.d: <u>Develop linkages and partnerships among international research and development activities and Maui businesses.</u> | ✓ | | |
| <p>Analysis: The MRTP was established in the early 1980's to diversify the State's economy by encouraging research and technology based businesses to open in the Park. It has been over 25 years since the underlying zoning documents for the Park have been updated. The updated Master Plan responds to the most current trends in the development of innovation centers nationwide. The Master Plan Update will strengthen Maui's economy by making the MRTP a more attractive location for knowledge-based industries and related/supportive businesses. These industries will create a diverse range of jobs for residents, many in areas that have proven to pay substantially more than the average area wage. This will in turn benefit the rest of the economy. The result will be an increase in economic activities and employment opportunities consistent with community needs and desires, which will promote increased employment and entrepreneurial opportunities for Maui's residents.</p> | | | |



As discussed in Section III.B.3 (Economy) the MRTP is projected to generate approximately \$1.39 billion of direct capital investment into the Maui economy and will provide an estimated 73,507 “worker years” of employment and \$2.7 billion in total wages over a 19 year period. This will result in expenditures that will have a positive direct, indirect and induced impact on the County of Maui economy. During the operations phase, the MRTP will significantly increase the level of capital investment in the region which will create employment opportunities and create an economic stimulus for the region. The MRTP will provide direct employment opportunities for Maui residents and contribute to the diversification and growth of the Island’s and State’s economies. After “stabilization” is estimated that the Park will support 5,878 jobs with an annual payroll of about \$217 million.

The MRTP project site is located within the proposed Maui Island Plan’s Urban Growth Boundary. The Project is being prepared pursuant to smart growth and New Urbanism planning principles, with a distribution of land uses that provides housing, jobs, shopping for daily needs, open space and recreation areas in close proximity to each other. The Project also incorporates a diversity of housing types that will be sold at various price points to create a balanced and diverse community. A small area of the site will be used for a business hotel. The business hotel, a currently allowed use, will provide an important amenity for the Park’s businesses, which have long grappled with accommodating business visitors in a convenient location that is removed from the resorts.

| Objective: | S | N/S | N/A |
|---|----------|------------|------------|
| Objective 4.1.2 Increase activities that support principles of sustainability. | ✓ | | |
| Policies: | S | N/S | N/A |
| 4.1.2.a: Support industries that are sustainable, and culturally and environmentally sensitive. | ✓ | | |
| 4.1.2.b: Encourage and support local businesses. | ✓ | | |
| 4.1.2.c: Support the clustering of economic activities and improve linkages to transportation/telecommunications infrastructure that serve such economic activities. Substitute imports with locally-produced ser- | ✓ | | |



| | | | |
|---|----------|------------|------------|
| <u>vices and products where practicable.</u> | | | |
| <u>4.1.2.d: Support the development of economic development clusters in targeted industry sectors.</u> | ✓ | | |
| <u>4.1.2.e: Encourage all businesses to save energy, water, and other resources.</u> | ✓ | | |
| <p>Analysis: As discussed in Section II.E 3 and 5 the MRTP Master Plan Update incorporates New Urbanism planning techniques and urban design strategies which help to create a settlement pattern that by its more compact and mixed-use character is less dependent on motorized transportation. This will facilitate a self-sufficient community and result in shorter commutes by offering multi-modal transportation opportunities. The Plan also makes considerable investment into infrastructure that supports a unified pedestrian and bicycle system within the Park with connections to its existing and future surroundings. The system will connect residential areas, neighborhood parks and employment areas. The Master Plan Update will utilize New Urbanism planning techniques and urban design strategies to make the MRTP a more vibrant and attractive environment for businesses to locate and grow their operations.</p> | | | |
| Objective: | S | N/S | N/A |
| Objective 4.1.3 Improve the island’s business climate. | ✓ | | |
| Policies: | S | N/S | N/A |
| 4.1.3.a: Upgrade, maintain the quality, and improve access to telecommunications infrastructure. | | | ✓ |
| 4.1.3.b: Ensure an adequate supply of affordable workforce housing. | ✓ | | |
| 4.1.3.c: Develop neighborhoods and communities that are attractive to the workforce of a diversified economy. | ✓ | | |
| 4.1.3.d: Encourage, nurture, and reward entrepreneurship and innovation. | ✓ | | |
| 4.1.3.e: Encourage employers to establish incentive programs, such as telecommuting, flexible working hours, four-day work weeks, health incentives, and rebates for public transportation users. <u>Support flexibility in workforce policies compatible with business and quality of life goals.</u> | ✓ | | |



| | | | |
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| 4.1.3.f: Assist community development organizations to revitalize and develop neighborhoods and communities that are attractive to the workforce of a diversified economy. | ✓ | | |
| <p>Analysis: The MRTP Project site is located within the proposed Draft Maui Island Plan’s Urban Growth Boundary. The Project is being prepared pursuant to smart growth and New Urbanism planning principles with a distribution of land uses that provides housing, jobs, shopping for daily needs, open space and recreation areas in close proximity to each other. The project also incorporates a diversity of housing types that will be sold at various price points to create a balanced and diverse community. Together, these elements of the proposed project will help to create neighborhoods and communities that are attractive to the workforce of a diversified economy.</p> <p>The Master Plan Update will also better respond to the needs of a broader range of businesses by offering a much more diversified and balanced offering of commercial space, ranging from live-work space to mid-size and larger commercial spaces. This diversified offering of commercial space will hold particular appeal to entrepreneurs, who will now have access to smaller, more viable space as part of a much larger knowledge-industry and research and technology core.</p> <p>The Plan also seeks to reduce automobile dependence by developing compact and mixed use neighborhoods and also incorporating transportation demand management measures into the design. Some of these measures include: 1) encouraging alternate work schedules and off peak hours for employment generators, and 2) supporting park and ride, ridesharing, car-pooling and van pooling, regional and sub-regional shuttles.</p> | | | |
| Emerging Sectors | | | |
| Goal: A diverse array of emerging economic sectors. | | | |
| Objective: | S | N/S | N/A |
| Objective 4.4.1 Increase efforts to develop emerging industries. <u>Support increased investment and expanded activity in emerging industries.</u> | ✓ | | |
| Policies: | S | N/S | N/A |
| 4.4.1.a: Support the development of and access to state-of-the-art voice, video, and data telecommunications systems <u>and high-speed internet.</u> | ✓ | | |



| | | | |
|--|---|-----|-----|
| 4.4.1.b: Attract and assist industries to compete in high technology activities such as those related to renewable energy, green technologies, diversified agriculture, ocean sciences, health sciences, and other knowledge-based industries. | ✓ | | |
| 4.4.1.c: Support new industries that are environmentally and culturally sensitive such as health and wellness, sports and outdoor activities, cultural activities, the arts, film-making, entertainment, and digital media. | ✓ | | |
| 4.4.1.d: Support the continued development of the Maui Research and Technology Park in Kihei as a center for research and development and education. <u>a sustainable, culturally sensitive, astronomy industry.</u> | ✓ | | |
| <u>4.4.1.e: Support the continued development of the Maui Research and Technology Park in Kihei, as a center for research and development, education, and diversified economic development, as provided by the Maui County Code.</u> | ✓ | | |
| 4.4.1.e f: Work with appropriate organizations to support the development of high technology clusters around renewable energy, diversified agriculture, ocean sciences, health sciences, and other knowledge-based industries. | ✓ | | |
| <p>Analysis: The MRTP Master Plan Update responds to the most current trends in the development of innovation centers nationwide. The Master Plan Update will strengthen Maui's economy by providing a location to support a diverse array of emerging economic sectors making the MRTP a more attractive location for investment into knowledge-based industries than the current controlling documents allow for. These industries have proven to pay higher than average wages, and will create additional employment opportunities for residents, which will in turn stimulate the rest of the economy. The result will be an increase in economic activities and employment opportunities consistent with community needs and desires, which will promote increased employment and entrepreneurial opportunities. The types of knowledge based businesses that will be encouraged to locate in the park will include information and software development, financial data processing, software development together with many other knowledge-based fields.</p> | | | |
| Objective: | S | N/S | N/A |
| Objective 4.4.2 Increase the development of renewable energy technologies <u>that are supported by the local community.</u> | | | ✓ |
| Policies: | S | N/S | N/A |



| | | | |
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| 4.4.2.a: Support the expansion of the renewable energy sector and the use of solar, wind, wave, and biofuel technologies. | | | ✓ |
| 4.4.2.b: Provide incentives to encourage renewable energy development, the use of green energy technologies, and energy conservation. | | | ✓ |
| <p>Analysis: Although the MRTP’s mission isn’t targeted specifically to the renewable energy sector, MRTP will market itself to this sector as the renewable energy economy is a subset of knowledge-industry and will be an important component of the MRTP’s future development. Current users in the Park generate nearly a megawatt of renewable electricity, and more is contemplated. Inherent in the Master Plan Update for the Park are energy and resource conservation, energy efficient design, and support for the use of renewable energy technologies by Park tenants. The MRTP currently has an ongoing solar energy demonstration project and actively promotes research and development in a variety of technologies.</p> | | | |
| <u>Small Business Development</u> | | | |
| <u>Goal: Small businesses will play a key role in Maui’s economy.</u> | | | |
| Objective: | <u>S</u> | <u>N/S</u> | <u>N/A</u> |
| <u>Objective 4.5.1 Increase the number of an revenue generated by small businesses and decrease the percentage of small business failures.</u> | ✓ | | |
| Policies: | <u>S</u> | <u>N/S</u> | <u>N/A</u> |
| <u>4.5.1.a: Provide incentives and support for small businesses and entrepreneurs that incorporate sustainable technologies and practices into their operations, utilize local materials, or produce and sell locally-made goods or services.</u> | ✓ | | |
| <u>4.5.1.b: Assist traditional “mom and pop” business establishments.</u> | | | ✓ |
| <u>4.5.1.c: Reduce barriers to small business development.</u> | ✓ | | |
| <u>4.5.1.d: Require, where feasible, the government procurement of goods and services from locally owned, small businesses.</u> | | | ✓ |
| <u>4.5.1.e: Support community markets and venues that sell locally-made produce, goods, and services.</u> | ✓ | | |
| <p><u>Analysis: The Master Plan Update will strengthen Maui’s economy by providing a location to house small businesses, making the MRTP a more attractive location for investment into small business development than the current controlling documents allow for. Small businesses will create additional employment opportunities for residents, which will in turn</u></p> | | | |



stimulate the rest of the economy. The result will be an increase in economic activities and employment opportunities consistent with community needs and desires, which will promote increased employment and entrepreneurial opportunities.

Chapter 7 Land Uses

Urban Areas

“Urban areas are characterized by a convergence of housing, jobs, civic activities, commercial services and shopping.”

“The Maui Island plan will promote vibrant and sustainable communities, economize on infrastructure, and protect open space.”

(Source: Page 7-17 Draft MIP.)

| | | | |
|--|---|-----|-----|
| Draft Maui Island Plan | S | N/S | N/A |
| Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable | | | |
| Land Use | | | |
| Urban Land Use Issues | | | |
| Goal: Maui will have livable human scale urban communities, an efficient and sustainable land use pattern, and sufficient housing and services for Maui residents. | | | |
| Objective: | S | N/S | N/A |
| Objective 7.3.1: Facilitate and support a more compact, efficient, human-scale urban development pattern. | ✓ | | |
| Policies: | S | N/S | N/A |
| Policy 7.3.1.a: Ensure higher density compact urban communities, infill | ✓ | | |



| | | | |
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| and redevelopment of underutilized urban lots within Urban Growth Boundaries. | | | |
| Policy 7.3.1.b: Maintain a distinct separation between communities such as Wailuku and Waikapu; Pukalani and Makawao; Pukalani and Kula; Makawao and Haliimaile; and Lahaina and Kaanapali to protect the character and identity of Maui’s communities. | | | ✓ |
| Policy 7.3.1.c: Require, through regulations, the preparation and approval of Development Impact Assessment Reports, project master plans, and design guidelines Strengthen evaluation requirements for new urban expansion, new towns, and major urban infill projects within urban growth boundaries areas. Tailor submittal requirements to reflect the impact or scale of different projects. | ✓ | | |
| Policy 7.3.1.d: Ensure future amendments to urban growth boundaries achieve the following: (1) provide a beneficial extension of the existing community; (2) is in areas where it is cost-effective to provide and operate infrastructure/public service facilities; and (3) do not promote automobile-oriented land use patterns. | | | ✓ |
| Policy 7.3.1.e: Prohibit Evaluate the impact of gated communities and other design impediments to ensure the on interconnectivity between adjacent communities. | ✓ | | |
| Policy 7.3.1.f: Encourage the development and implementation of neighborhood design standards that are environmentally friendly such as <u>LEED for Neighborhood Development</u> LEED-ND standards. | ✓ | | |
| Policy 7.3.1.g: Promote agriculture by encouraging community gardening, community supported agricultural programs, and farmers’ markets within and adjacent to urban areas. | ✓ | | |
| Policy 7.3.1.h: Prevent the displacement of light and heavy industrial uses from Maui’s industrial districts by allowing only a limited amount of complementary commercial and office uses. | | | ✓ |
| <u>Policy 7.3.1.i: Discourage land use and urban design that impedes interconnectivity between adjacent communities.</u> | ✓ | | |



Analysis: The MRTP is located on lands surrounding an existing employment base with urban development and supporting infrastructure in place. The subject property has been community planned for urban development since the 1980's and is within the proposed Maui Island Plan's Urban Growth Boundary. The Project is being prepared pursuant to smart growth and New-Urbanism planning principles with a distribution of land uses that provides housing, jobs, shopping for daily needs, open-space and recreation areas in close proximity to each other. The Project also incorporates a diversity of housing types that will be sold at various price points to create a balanced and diverse community. The residential areas will not include gated communities; and design and appearance will be controlled by neighborhood design standards to promote environmentally friendly neighborhoods.

As discussed in Section II.E.F the MRTP Master Plan Update incorporates New Urbanism planning techniques and urban design strategies which help to create a settlement pattern that by its more compact and mixed-use character is less dependent on motorized transportation. This will facilitate a self-sufficient community and result in shorter commutes by offering multi-modal transportation opportunities. The Plan also makes considerable investment into infrastructure that supports a unified pedestrian and bicycle system within the Park with connections to its existing and future surroundings. The system will connect residential areas, neighborhood parks and employment areas. The result will be a more diverse and dynamic economy with increased employment opportunities for residents in industries with better than average wages.

| | | | |
|--|---|-----|-----|
| Objective: | S | N/S | N/A |
| Objective 7.3.2 Facilitate more self-sufficient and sustainable communities. | ✓ | | |
| Policies: | S | N/S | N/A |
| 7.3.2.a: When developing new communities, provide sufficient lands for commercial, appropriate industrial, educational, spiritual and non-profit uses to serve the daily needs of community residents. | ✓ | | |
| 7.3.2.b: Site community facilities such as schools, parks, libraries, and community centers within walking and biking distance of residences. | ✓ | | |
| 7.3.2.c: Facilitate self-sufficient communities and shorten commutes by: a. directing residential development to job-rich areas; | ✓ | | |



| | | | |
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| b. Allowing appropriate commercial development and community services to shorten commutes; and c. Allowing home occupations <u>or home based businesses</u> that are compatible with surrounding neighborhoods <u>and lifestyles</u> . | | | |
| 7.3.2.d: Ensure that major employment centers are located in areas that encourage <u>where appropriate, that affordable employee housing and multi-modal transportation opportunities are located near major employment centers.</u> | ✓ | | |
| 7.3.2.e: Discourage the establishment of bedroom communities where long commutes are required to employment centers. | ✓ | | |
| 7.3.2.f: Facilitate development of housing by focusing projects in locations where land and infrastructure costs facilitate the development of affordably-priced housing. | ✓ | | |
| 7.3.2.g: Provide incentives to facilitate the development of multi-family housing. | ✓ | | |
| <u>7.3.2.h: Encourage the placement of rental housing projects in the same areas for-sale housing to facilitate mixed-income communities.</u> | | | ✓ |
| <u>7.3.2.i: Develop communities that provide sufficient parks, schools, libraries, and other essential public facilities and services to serve resident needs.</u> | | | ✓ |
| <u>7.3.2.j: Promote agriculture by encouraging community gardening, edible landscaping, community supported agricultural programs, and farmers markets within and adjacent to urban areas.</u> | | | ✓ |
| <p>Analysis: The MRTP Master Plan Update is strongly supportive of Objective 7.32 and its subordinate policies. The Park is a long established employment center and is envisioned to become an even more important one in the next several decades. Recognizing the importance of locating jobs near housing, the Plan incorporates a diversity of housing opportunities, including single-family and various types of multi-family, within the Park itself. While the proposed housing won't create a complete equilibrium of jobs-housing, it will significantly alleviate the necessity for vehicular trips to and from the Park. The Park is also located close to regional shopping, recreation and educational facilities that together with retail and civic uses programmed for the Park will make it a complete and distinct community within the larger Kihei community.</p> <p>As discussed in Section II.E.3 and 4 (Proposed Action) the MRTP Master Plan Update incorpo-</p> | | | |



| | | | |
|--|----------|------------|------------|
| <p>rates New Urbanism planning techniques and urban design strategies which help to create a settlement pattern that by its more compact and mixed-use character is less dependent on motorized transportation. These techniques and strategies will facilitate a self-sufficient community and result in shorter commutes by offering multi-modal transportation opportunities. The Plan also makes considerable investment into infrastructure that supports a unified pedestrian and bicycle system within the Park with connections to its existing and future surroundings. The system will connect residential areas, neighborhood parks and employment areas.</p> | | | |
| Objective: | S | N/S | N/A |
| Objective 7.3.3 Strengthen the island’s sense of place. | ✓ | | |
| Policies: | S | N/S | N/A |
| 7.3.3.a: Protect and enhance the unique architectural and landscape characteristics of each community. | | | ✓ |
| 7.3.3.b: Encourage Hawaiian Architecture and tropical building designs. | ✓ | | |
| 7.3.3.c: Support the continued revitalization of Wailuku Town and Kahului’s commercial core and harbor-front without displacing traditional, cultural, recreational and customary uses. | | | ✓ |
| 7.3.3.d: Strongly encourage the preservation of buildings, structures, and sites of historic significance. | | | ✓ |
| 7.3.3.e: Require Community-based Public Design Charettes/ <u>community input through</u> Design Workshops for major new urban expansion, new towns, and major urban infill projects. | ✓ | | |
| 7.3.3.f: Require design enhancement, landscaping, and integration of park and rides, bicycle parking areas and mass transit infrastructure to mitigate the effect of parking lots and structured parking on the urban landscape. | ✓ | | |
| 7.3.3.g: Ensure that safe and attractive public spaces (e.g., plazas, parks, town/village squares) are provided throughout the island’s urban areas. | ✓ | | |
| <p>Analysis: The MRTP Master Plan Update was prepared with considerable community input. Numerous meetings were conducted and presentation given to community stakeholders, including the Kihei Community Association, current tenants of the Park, the Maui Economic Development Board, Maui Tech Ohana, neighboring property owners, Urban Design Review</p> | | | |



Board and State and County agencies.

In order to create a sense of place, the Master Plan Update proposes a diversification of land uses within the Park. Creating a “place”, a location which people are drawn to, involves a combination of factors. Among others, these factors include diversification of land uses and creation of an attractive and welcoming public realm. A satisfying and interesting place contains a variety of users and activities, and is friendly to people on foot. In order to create a place, the Master Plan proposes the diversification of land uses within the Park. The addition of housing, retail, civic, and open spaces to the Park will add amenities for business attraction and retention. and will create a true neighborhood in place of the isolated, single use Park that exists today. The combination of elements will create synergies beyond what all of these land uses would add up to as separated pods, and this added energy will drive development of employment of the Park.

The MRTP Master Plan Update provides attractive public spaces and parks that will be landscaped with native plants and shade trees. A core feature of the Master Plan Update is a landscaped village greenway that runs mauka to makai, linking the roundabout at North-Ninaiu Street with commercial, residential and retail uses. Pedestrian walkways, landscape plantings and plaza space will be incorporated throughout this park which will terminate at a plaza overlooking the Elleair Golf Course with wide open Pacific Ocean and West Maui views. In addition, a diversity of neighborhood parks is incorporated throughout the project offering active and passive recreation opportunities.

| | | | |
|--|---|-----|-----|
| Objective: | S | N/S | N/A |
| Objective 7.3.4 Seek to manage the impact of tourism on resident's qualities of life. Strengthen planning and management for the visitor industry to protect resident quality of life and enhance the visitor experience. | ✓ | | |
| Policies: | S | N/S | N/A |
| 7.3.4.a: Manage bed and breakfast homes through permitting, and limiting total permits in accordance with adopted regulations and community plan policies. Discourage the conversion of hotel units to timeshares and fractional ownership. | | | ✓ |
| 7.3.4.b: A) Discourage the conversion of hotel units to timeshares and fractional ownership. B) Monitor and manage the amount of and im- | | | ✓ |



| | | | |
|---|----------|------------|------------|
| pacts from timeshares and fractional ownership. | | | |
| 7.3.4.c: A) Enforce laws regarding bed and breakfast homes and transient vacation rentals that are effective at any given time, until the laws are actually amended to no longer be effective. B) Manage transient rentals through permitting in accordance with adopted regulations and community plan policies. <u>Manage short term rentals and bed-and-breakfast homes through a permitting and regulatory process in accordance with adopted ordinances and community plan policies.</u> | | | ✓ |
| 7.3.4.d: Limit large scale resort development to the four existing resort destination areas of Wailea, Makena, Kapalua and Kaanapali. “Large Scale Resort” is defined as complexes <u>that include multiple accommodation facilities, activity businesses, retail complexes, and other amenities.</u> | | | ✓ |
| Analysis: The MRTP does not involve development of bed and breakfast or large scale resorts; however, a small area of the site will be used for a business hotel. The business hotel, a currently allowed use, will provide an important amenity for the Park’s businesses, which have long grappled with accommodating business visitors in a convenient location removed from the resorts. Therefore the development of the MRTP is supportive of this objective to manage the impact of tourism on resident’s quality of life. | | | |
| Objective: | S | N/S | N/A |
| Objective 7.3.5 Ensure that Maui’s Planning process becomes more transparent, efficient and innovative. | ✓ | | |
| Policies: | S | N/S | N/A |
| 7.3.5.a: Encourage greater community involvement in land use planning and decision making. | | | ✓ |
| 7.3.5.b: Establish a predictable and timely development review process that facilitates the approval of projects that meet planning and regulatory requirements. | | | ✓ |
| 7.3.5.c: Increase inter-agency coordination between the Department of Planning and all State and County agencies responsible for infrastructure and public facilities provision, <u>particularly as it relates to the mitigation of long-term cumulative impacts resulting from development projects.</u> | | | ✓ |
| 7.3.5.d: Provide greater certainty and transparency in the development | | | ✓ |



| | | | |
|--|--|--|---|
| review process. | | | |
| 7.3.5.e: Expand and maintain land use and geographic information system databases for improved decisions and make data and products available to the public. | | | ✓ |
| Analysis: The master planning and land use entitlement processes have facilitated a great deal of community involvement in the decision making process for the MRTP. | | | |

F. KIHEI-MAKENA COMMUNITY PLAN

Within Maui County, there are nine (9) community plan regions. From a General Plan implementation standpoint, each region is governed by a Community Plan which sets forth desired land use patterns, as well as goals, objectives, policies, and implementing actions for a number of functional areas including infrastructure-related parameters. The purpose of the Community Plan is to outline a relatively detailed agenda for carrying out these objectives.

The MRTP is located within the Kihei-Makena Community Plan region that was adopted by Ordinance No. 2641 on March 6, 1998. The majority of the park is designated Project District 6 (R&T Park) in the Community Plan, with a portion designated *Public/Quasi-public*. Refer to Figure 6.

A Community Plan Amendment will be sought to bring the entire Park site into a community plan designation that better aligns with the vision of the Master Plan Update and amendments to Maui County Code (MCC) Title 19.33.

The following Kihei-Makena Community Plan goals, objectives, and policies are applicable to the proposed action:

| | | | |
|---|---|-----|-----|
| Kihei Makena Community Plan | S | N/S | N/A |
| Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable | | | |
| Land Use | | | |
| Goal: <i>A well-planned community with land use and development patterns designed to achieve the efficient and timely provision of infrastructural and community needs while preserving and enhancing the unique character of Ma'alaea, Kihei, Wailea and Makena as well as the region's natural environment,</i> | | | |



| | | | |
|--|----------|------------|------------|
| <i>marine resources and traditional shoreline uses.</i> | | | |
| Objectives and Policies: | S | N/S | N/A |
| a. Acquire beachfront properties for public use. | | | ✓ |
| b. Identify priority growth areas to focus public and private efforts on the provision of infrastructure and amenities to serve existing residents and to accommodate new growth. | ✓ | | |
| c. Upon adoption of this plan, allow no further development unless infrastructure, public facilities, and services needed to service new development are available prior to or concurrent with the impacts of new development. | ✓ | | |
| d. Limit hotel uses to those areas presently planned for hotel use, and limit hotel development until adequate public facilities and services are established to meet existing needs. | ✓ | | |
| e. Establish a system of parks, utility easements, shoreline areas, drainage ways and wetlands as an open space framework for the urban areas of the region, i.e. where structures exist or are planned to exist, and provide an integrated system of pedestrian and bicycle paths. | ✓ | | |
| f. Establish a distribution of land uses which provides housing, jobs, shopping, open space, and recreation areas in close proximity to each other in order to enhance Kihei's neighborhoods and to minimize dependence on automobiles. | ✓ | | |
| g. Encourage the establishment of single-family and multi-family land use designations which provide affordable housing opportunities for areas which are in close proximity to infrastructure systems and other urban services. | ✓ | | |
| h. Develop commercial services at the following locations to meet community needs: 1) North Kihei, between the existing South Kihei Road, Pi'ilani Highway and Uwapo Road. 2) A central business and commercial center for Kihei clustered about the South Kihei Road/Road "C" intersection. 3) In existing commercially zoned areas along South Kihei Road in the vicinity of Kalama Park. 4) Along South Kihei Road opposite the Kama`ole beach parks. | | | ✓ |
| i. Limit commercial services to neighborhood business uses or other | ✓ | | |



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| low-key business activities with a residential scale on those properties which abut single-family residential areas. | | | |
| j. Locate resort-related retail commercial facilities at strategic points in the Wailea and Makena destination areas. | | | ✓ |
| k. Provide for limited expansion of light industrial services in the area south of Ohukai and <i>mauka</i> of Pi'ilani Highway, as well as limited marine-based industrial services in areas next to Ma'alaea Harbor. Provide for moderate expansion of light industrial use in the Central Maui Baseyard, along Mokulele Highway. These areas should limit retail business or commercial activities to the extent that they are accessory or provide service to the predominate light industrial use. These actions will place industrial use near existing and proposed transportation arteries for the efficient movement of goods. | | | ✓ |
| l. Preserve coastal vistas, open space and recreational opportunities for residents by prohibiting further shoreline development except in places designated on the 1997 community plan land use map, and prohibit future community plan amendments along the shoreline that would increase the intensity of land use, with the exception of land use that is public or quasi-public in nature. | | | ✓ |
| m. Provide for limited residential expansion in Ma'alaea which complements the existing natural and built environment. | | | ✓ |
| n. Maintain State Conservation District boundaries in the planning region. However, State Conservation District reclassification of lands may be warranted to enhance environmental preservation. | | | ✓ |
| o. Establish a site for a future higher educational institution north of the research and technology park project district. | ✓ | | |
| p. Prevent urbanization of important agricultural lands. | | | ✓ |
| q. Allow ohana units only where sufficient infrastructure is available. | ✓ | | |
| r. Allow special permits in the State Agricultural Districts to accommodate unusual yet reasonable uses including: (1) limited agriculturally related commercial, public and quasi-public uses serving the immediate community; (2) uses clearly accessory or subordinate to a principal agricultural use on the property; (3) public facility uses such as utility installations or landfills whose location depends on technical considerations; and (4) extractive industries, such as quarrying, where the op- | | | ✓ |



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| eration would not adversely affect the environment or surrounding agricultural uses. | | | |
| Implementing Actions: | S | N/S | N/A |
| a. Prepare a prioritized island-wide directed and managed growth strategy to ensure that the location, rate and timing of development is consistent with the provision of infrastructure and public facilities and services. | ✓ | | |
| b. Include conditions of approval for new residential developments requiring that adequate school facilities shall be in place before a certificate of occupancy is issued. | ✓ | | |
| c. Prepare an Open Space Master Plan for the region to provide a unified system of non-motorized access to community resources, and to provide a planned program of resource stewardship. Establish standards for the use of drainage ways, gulches, wetlands, and easements for public access. The Open Space Master Plan shall be prepared by partnership between governmental and non-governmental organizations. The plan preparation shall include, but not be limited to, public input and informational workshops; inventory and mapping of cultural, natural, and open space resources; and review of legal options and constraints. Professional design of the Open Space Master Plan should be funded; and, upon its adoption, the Open Space Master Plan should be incorporated into the Kihei-Makena Community Plan. | | | ✓ |
| d. Control the timing and phasing of project district construction through zoning in order to ensure systematic and incremental development. Such an action shall prevent haphazard development, and ensure that the provision of adequate infrastructure and public facilities and services takes place prior to or concurrent with development. | ✓ | | |
| e. Review, amend and adopt, as appropriate, zoning ordinances and maps to carry out the intent of the land use categories identified in the plan. | ✓ | | |
| f. Establish and enforce building height limits and densities <i>mauka</i> of Pi'ilani Highway which preserve significant <i>mauka</i> views and vistas. | ✓ | | |
| Analysis: The MRTP was established in the early 1980's to diversify the State's economy by encouraging research and technology based businesses to open in the Park. It has been over 25 years since the underlying zoning documents for the Park have been updated. The Master | | | |



Plan Update responds to the most current trends in the development of innovation centers nationwide. The Master Plan Update will strengthen Maui's economy by making the MRTP a more attractive location for knowledge-based industries and related/supportive businesses. These industries will create a diverse range of jobs for residents, many in areas that have proven to pay substantially more than the average area wage. This will in turn benefit the rest of the economy. The result will be an increase in economic activities and employment opportunities consistent with community needs and desires, which will promote increased employment and entrepreneurial opportunities for Maui's residents.

The MRTP project site is located within the ~~proposed~~ Maui Island Plan's Urban Growth Boundary. The Project is being prepared pursuant to smart growth and New Urbanism planning principles, with a distribution of land uses that provides housing, jobs, shopping for daily needs, open space and recreation areas in close proximity to each other. The Project also incorporates a diversity of housing types that will be sold at various price points to create a balanced and diverse community. A small area of the site will be used for a business hotel. The business hotel, a currently allowed use, will provide an important amenity for the Park's businesses, which have long grappled with accommodating business visitors in a convenient location that is removed from the resorts.

As discussed in Section II.E.3 and 4 (Proposed Action) the MRTP Master Plan Update incorporates New Urbanism planning techniques and urban design strategies which help to create a settlement pattern that by its more compact and mixed-use character is less dependent on motorized transportation. This will facilitate a self-sufficient community and result in shorter commutes by offering multi-modal transportation opportunities. The Plan also makes considerable investment into infrastructure that supports a unified pedestrian and bicycle system within the Park with connections to its existing and future surroundings. The system will connect residential areas, neighborhood parks and employment areas.

As discussed in Section III.A.10 (Agricultural Resources) the development of the MRTP will not reduce the inventory of agriculturally significant lands. The property is rated "E" with some portions "Unclassified" under the LSB classification system. The property is "Unclassified" under the ALISH classification system, indicating that the property is not agriculturally significant.

Design guidelines for the MRTP will enforce building height limits and densities. The proposed expansion of the MRTP will not include structures taller than ~~45~~ 50 feet to preserve



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| mauka views of Haleakala. | | | |
| Environment | | | |
| Goal: Preservation, protection, and enhancement of Kihei-Makena's unique and fragile environmental resources. | | | |
| Objectives and Policies: | S | N/S | N/A |
| a. Acquire beachfront properties for public use. | | | ✓ |
| b. Preserve, protect, and restore unique natural areas with significant conservation values. | | | ✓ |
| c. Require that new shoreline development respect shoreline resources and maintain public access: 1) Existing dune formations are important elements of the natural setting and should remain intact. 2) Indigenous or endemic strand vegetation should remain undisturbed; new development and landscaping should treat such vegetation as given conditions. 3) Planning for new shoreline development, as well as redevelopment, shall consider the cyclic nature of beach processes. Setbacks shall be used to provide a sufficient buffer between the ocean and structures to allow for periodic and long-term accretion and erosion of the shoreline. A Coastal Erosion Rate Analysis shall be developed. The planning commissions are encouraged to incorporate data from the analysis into planning decisions for shoreline areas, especially with respect to shoreline building setbacks. In the interim period prior to the completion of the analysis, the planning commissions are further encouraged to utilize minimum setbacks for multi-family and hotel uses of 150 feet from sandy shorelines, and 75 feet from rocky shorelines, or 25% of the average lot depth, whichever is greater. Where shoreline erosion threatens existing structures or facilities, beach replenishment shall be the preferred means of controlling erosion, as opposed to sole reliance on seawalls or other permanent shoreline hardening structures. | | | ✓ |



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| 4) Storm water run-off from proposed developments shall not adversely affect the marine environment and nearshore and offshore water quality. | | | |
| 5) Planning, design, and layout for new development shall be integrated with public shoreline use and sound principles of resource management. | | | |
| d. Permit recreational activities in the shoreline zone which respond to shoreline characteristics and principles of sound resource management. Activities which damage or deplete shoreline resources, or are incompatible with ecological systems, shall not be permitted. | | | ✓ |
| e. Protect the quality of nearshore waters by ensuring that land-based discharges meet water quality standards. Continued monitoring of existing and future waste disposal systems is necessary to ensure their efficient operation. Programs should be implemented to reduce the reliance on injection wells for wastewater disposal. | ✓ | | |
| f. Protect all wetland resources, such as those at Kealia Pond and near Road "C". These open space and wildlife habitat resources are important for flood control and for their natural beauty. | | | ✓ |
| g. Require the integration of wetlands and drainageways into an open space, pedestrian pathway, and bikeway system within and around the Lipoa business district. | | | ✓ |
| h. Encourage such land uses as would serve to reduce hazardous fire conditions in the developed community plan areas. | ✓ | | |
| i. Discourage shoreline hardening structures where North Kihei Road abuts the coastline. Instead, use soft approaches such as dune restoration and beach nourishment with or without supporting structures. | | | ✓ |
| Implementing Actions: | S | N/S | N/A |
| a. Implement programs to reduce the reliance on injection wells for wastewater disposal. | ✓ | | |
| b. Establish and maintain a monitoring program for nearshore waters. | | | ✓ |
| c. Support the development of the Ma`alaea-Kealia bypass highway. | | | ✓ |



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| d. Develop a master plan for a recreational coastline access along North Kihei Road once the Ma`alaea-Kealia bypass is planned. | | | ✓ |
| e. Facilitate protection of valuable shoreline resources in the Open Space Master Plan by transferring State Beach Reserves and adjacent undeveloped State-owned lots to County jurisdiction. Prepare and implement a plan for enhancement of these lands to provide stewardship of cultural and natural resources and the fostering of traditional cultural activities. | | | ✓ |
| f. Survey, map, and describe the <i>mauka</i> boundaries of the State Beach Reserves to delineate between public and private property. | | | ✓ |
| g. Partner with the Na Ala Hele, South Maui Heritage Corridor, Kihei 2000, and Bikeways Maui organizations to establish a continuous trail/greenway/bikeway system from Kealia Pond to Kilohana Road, to provide pedestrian lateral accesses to the Kihei-Makena shoreline, and to protect and maintain traditional shoreline access. | | | ✓ |
| h. Initiate a wetlands enhancement project with the Kihei Franks development in coordination with the enhancement of the County owned wetland adjacent to Saint Theresa's Church. Include a pedestrian and bikepath to allow school children to access the beach and greenway. | | | ✓ |
| i. Develop and implement a strategy for sand dune protection. | | | ✓ |
| j. New studies should be commissioned that seek to better understand site-specific causes of coastal erosion. | | | ✓ |
| k. Develop and implement a dune restoration project for the beach area along South Kihei Road from the Maui Lu to Suda Store. Such a project may use drift fencing, native vegetation, and dune walkovers in order to restore the sand dunes and prevent sand from blowing onto and across the road. | | | ✓ |
| <p>Analysis: As discussed in Section III.D.5 (Wastewater), the MRTP is connected to the Kihei Wastewater Reclamation Facility (WWRF) which provides treated water to the MRTP for use as irrigation water. The Elleair Golf Course and Monsanto Seed farm also utilize the treated water for irrigation. The WWRF was designed to accommodate future population growth in South Maui and has a surplus of treated R-1 effluent. The additional development proposed as part of the MRTP Master Plan Update would utilize available recycled water as well.</p> | | | |



The MRTP is not located on the coastline; therefore policies regarding shoreline resources are not applicable however during build-out and during the operation phase best management practices will be implemented to mitigate non-point source pollution to Maui’s coastal resources. In addition, through the EIS and entitlement application processes mitigation measures will be identified to help address any environmental impacts that may arise from the Project.

The development of the MRTP will involve removal of existing vegetative fuel for fires such as buffel grass to mitigate potential for wildfires on the property. Additionally the development of buildings, roadways, and irrigated landscape planting will reduce the risk of fire.

Cultural Resources

Goal: Identification, preservation, enhancement, and appropriate use of cultural resources, cultural practice, and historic sites that:

| | S | N/S | N/A |
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| a. Provides a sense of history and defines a sense of place for the Kihei Makena region; and | ✓ | | |
| b. Preserves and protects native Hawaiian rights customarily and traditionally exercised for subsistence, cultural, and religious purposes in accordance with Article XII, Section 7, of the Hawaii State Constitution, and the Hawaii Supreme Court's PASH opinion, 79 Haw. 425 (1995). | ✓ | | |
| Objectives and Policies: | S | N/S | N/A |
| a. Identify, preserve, protect and restore significant historical and cultural sites. | ✓ | | |
| b. Foster an awareness of the diversity and importance of cultural and archaeological resources and of the history of Kihei-Makena. Promote distinct cultural resources as an identifying characteristic of the region. | | | ✓ |
| c. Encourage and protect traditional <i>mauka</i> and <i>makai</i> accesses, cultural practices and rural lifestyles. | ✓ | | |
| d. Protect those areas, structures and elements that are a significant and functional part of Hawaii’s ethnic and cultural heritage. | ✓ | | |
| e. Encourage community stewardship of historic sites. | ✓ | | |
| f. Preserve and restore historical roads and paths as cultural resources, and require such resources to be available to the public. | | | ✓ |
| g. Recognize and respect family ancestral ties to certain sites. | ✓ | | |



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| h. Establish “cultural parks” and heritage corridors for visitation and education. | | | ✓ |
| i. Establish cultural and educational programs to perpetuate Hawaiian and other ethnic heritages. | | | ✓ |
| j. Develop a County ordinance for indigenous architecture. | | | ✓ |
| Implementing Actions: | S | N/S | N/A |
| a. Prepare a Kihei-Makena specific Cultural Resources Management Plan. Use the plan to update the Countywide Cultural Resources Management Plan. Include an inventory of cultural resources and develop strategies for the preservation and enhancement of those resources. | | | ✓ |
| b. Require development projects to identify all cultural resources located within or adjacent to the project area, prior to application, as part of the County development review process. Further require that all proposed activity include recommendations to mitigate potential adverse impacts on cultural resources, including site avoidance, adequate buffer areas and interpretation. Particular attention should be directed toward the southern areas of the planning region. | ✓ | | |
| c. Implement a historic or cultural district overlay ordinance to provide protection for areas of significant archaeological, historical and cultural resources. These ordinances should be used at Palauea, Keone’o’io and other significant archaeological complexes in the Honua’ula District of the region. | | | ✓ |
| d. Upon development of Project District 8 (Palauea), the developer shall implement a historic park and interpretative center at Palauea, preserving the Palauea archaeological district and providing interpretation for sites in the Makena-Wailea region. Permitted uses shall include a cultural preserve/park area which shall be a minimum of at least 20 contiguous acres to protect and preserve known significant archaeological sites, which shall include, but not be limited to, the Palauea village and heiau complex, and the Palauea landing complex. Consideration should also be given to expanding the cultural preserve to include additional newly identified sites. Because of the significance of the sites, the County Cultural Resources Commission shall review all plans for development. Because of high public interest and the contiguous nature of the sites, consideration should be given to educational uses of the | | | ✓ |



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| sites. | | | |
| e. Formulate and adopt rural and historic district roadway standards for the old Makena Road to promote the maintenance of historic landscapes and streetscapes in character with the region, so long as these standards are for public roadway purposes, and do not obstruct or interfere with the rights of the public for the use and enjoyment of the area. Makena Road shall be kept open for public use. | | | ✓ |
| f. General sites that should be identified for preservation include, but are not limited to, the following: 1) Ancient Trails/Old Government Roads 2) Fishponds 3) Landings 4) Nearshore marine cultural resources 5) Significant native vegetation zones 6) Plantation ditch systems 7) Religious Structures (shrines, churches & heiau) 8) Old bridges 9) Plantation camps 10) Plantation era structures & homes 11) Petroglyphs 12) Burials | ✓ | | |
| g. Important sites and areas in the Kihei-Makena Community Plan region include the following: 1) Lahaina-Pali Trail 2) McGregor's Landing 3) Ma`alaea/McGregor Complex 4) Ma`alaea Petroglyphs 5) Kealia Pond 6) Naval Air Station Pu`unene 7) Kihei Landing 8) Keolahou Church 9) Kalepolepo Fishpond 10) David Malo Church 11) Waiohuli Kai Fishpond 12) <i>Ko`a</i> at Waimahaihai, Kama`ole 13) Kihei Regional Park Complex | | | ✓ |



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| <p>14) Kama`ole House Site 15) Palauea Complex 16) Makena Landing Area Sites 17) Makena Complex 18) Keawala`i Church 19) Pu`u Olai 20) Mo`omuku <i>Ko`a</i> 21) Kanahena Landing Area 22) Moanakala Village 23) Kanahena Point Complex 24) Kalaeloa Complex 25) Keone`o`io Village 26) Hoapili Trail 27) Keawanaku Complex 28) Wawaloa Complex 29) Alaha Complex 30) Waiakapuhi Complex 31) Kalulu Complex</p> <p>The above list is not comprehensive. It represents some of the well known sites that are currently listed in the State inventory of Historic Places and on file with the State and National Registers of Historic Places. Many more sites have not been surveyed for historic significance. A map indicating the general location of these sites is on file with the County's Department of Planning. The said map should be consulted prior to development proposals affecting the above-mentioned areas. Prior to any development approvals, the said map shall be referenced and the comments of the State Historic Preservation Division and the County Cultural Resources Commission shall be sought.</p> | | | |
| <p>Analysis: As discussed in Section 8 (Historical and Archaeological Resources) the Project's AIS yielded a very limited number of sites which is consistent with the Barren Zone model for pre-contact settlement in the Kihei area; therefore <u>no</u> further archaeological work is recommended for this project area.</p> <p>As discussed in Section 9 (Cultural Resources) the Project's CIA reported that there were no visible cultural resources, i.e. medicinal plants, shoreline resources, religious sites, or archeo-</p> | | | |



logical resources observed on the property. From a cultural practices and beliefs perspective, the subject property bears no apparent signs of cultural practices or gatherings currently taking place. The oral history interviews did not reveal any known gathering places on the subject property or any access concerns as a result of the proposed project. Therefore it can be concluded that development of the site will not impact cultural resources on the property or within its immediate vicinity.

Economic Activity

Goal: A diversified and stable economic base which serves resident and visitor needs while providing long-term resident employment.

| Objectives and Policies: | S | N/S | N/A |
|--|----------|------------|------------|
| a. Establish a sustainable rate of economic development consistent with concurrent provision of needed transportation, utilities, and public facilities improvements. | ✓ | | |
| b. Expand educational opportunities and encourage research and technological activities. | ✓ | | |
| c. Encourage research, development, and use of alternate energy sources. | ✓ | | |
| d. Establish balance between visitor industry employment and non visitor industry employment. | ✓ | | |
| e. Provide for the preservation and enhancement of important agricultural lands for a variety of agricultural activities, including sugar cane, diversified agriculture and aquaculture. | | | ✓ |
| f. Increase the availability and variety of commercial services to provide for regional needs and strategically establish small scale commercial uses within, or in close proximity to, residential areas. | ✓ | | |
| Implementing Actions: | S | N/S | N/A |
| a. Seek State and private support for the establishment of a four-year university in the Kihei-Makena region. | ✓ | | |
| b. Establish a comprehensive data base to analyze county and regional economic statistics. | | | ✓ |
| c. Where feasible within the region, utilize alternate energy sources in all public structures, and encourage the same in private residences. | ✓ | | |
| Analysis: As discussed in Section III.B.3 (Economy) the MRTTP is projected to generate approximately \$1.39 billion of direct capital investment into the Maui economy and will provide | | | |



an estimated 63,507 “worker years” of employment and \$2.7 billion in total wages over a 19 year period. This will result in expenditures that will have a positive direct, indirect and induced impact on the County of Maui economy. During the operations phase, the MRTP will significantly increase the level of capital investment in the region which will create employment opportunities and create an economic stimulus for the region. The MRTP will provide direct employment opportunities for Maui residents and contribute to the diversification and growth of the Island’s and State’s economies. After “stabilization” is estimated that the Park will support 5,878 jobs with an annual payroll of about \$217 million.

The Master Plan Update will incorporate New Urbanism principles in a manner that will reduce the Project’s environmental impacts while creating a more livable community. The design will enhance the physical quality of the property by providing housing and a variety of commercial services surrounding an existing employment base and supporting infrastructure.

As discussed in Section III.D.6 (Utilities) the MRTP will include energy-efficient design and conservation measures. Specifically, the design guidelines will encourage the use of energy efficient technology throughout the Park, specifically, in lighting, air-conditioning, and building materials. Solar hot water heaters will be utilized throughout the residential portion of the development and installation of Photovoltaic Energy Systems will be encouraged in all areas of the MRTP. Additionally, the MRTP currently has an ongoing solar energy demonstration project and actively promotes research and development in a variety of technologies.

Housing and Urban Design

Goal: A variety of attractive, sanitary, safe and affordable homes for Kihei’s residents, especially for families earning less than the median income for families within the County. Also, a built environment which provides complementary and aesthetically pleasing physical and visual linkages with the natural environment.

| Objectives and Policies: | S | N/S | N/A |
|--|---|-----|-----|
| a. Provide an adequate variety of housing choices and range of prices for the needs of Kihei’s residents, especially for families earning less than the median income for families within the County, through the project district approach and other related programs. Choices can be | ✓ | | |



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| increased through public/private sector cooperation and coordinated development of necessary support facilities and services. | | | |
| b. Require a mix of affordable and market-priced housing in all major residential projects, unless the project is to be developed exclusively as an affordable housing project. | ✓ | | |
| c. Preserve Kihei-Makena’s significant views of the Pacific Ocean and the broad vista to the Central Maui and Upcountry region. Prohibit the use of walls higher than 4 feet in front yard setbacks especially in areas close to the shoreline where view corridors can be blocked. | ✓ | | |
| d. Provide for integration of natural physical features with future development of the region. New development shall incorporate features such as gulches and wetlands into open space and pedestrian pathway and bikeway systems. | ✓ | | |
| e. Implement landscaped setbacks for future multi-family and commercial areas. Developments shall provide space for landscaped pedestrian ways and bikeways. | ✓ | | |
| f. Incorporate the principles of xeriscaping in all future landscaping. | ✓ | | |
| g. Encourage the use of native plants in landscaping in the spirit of Act 73, Session Laws of Hawaii, 1992. | ✓ | | |
| h. Recommend to the Maui County Arborist Committee for consideration as “Exceptional Trees” all trees, or groves of trees, that have historic or cultural value, represent an important community resource, or are exceptional by reason of age, rarity, location, size, aesthetic quality, or endemic qualities. Healthy mature trees shall be saved and incorporated in the landscape plans of subdivisions, roads, or any other construction or development. | | | ✓ |
| Implementing Actions: | S | N/S | N/A |
| a. Develop a comprehensive strategy for housing assistance which coordinates all available public and private resources and incorporates appropriate regulatory measures. | | | ✓ |
| b. Explore modifying zoning, building and subdivision codes to incorporate minimum lot sizes, compact parking ratios, and roadway and utility standards which meet resident needs but which may depart from customary urban standards, in an effort to reduce development and housing costs. | ✓ | | |



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| <p>c. Plant appropriate trees, turfgrass, and ground covers along existing public rights-of-way, roads, and parks. Neighborhood communities and citizen groups shall be encouraged to upgrade their streets and parks in accordance with the Maui County Planting Plan.</p> | <p>✓</p> | | |
| <p>d. Provide landscaped buffer areas between Pi'ilani Highway and adjacent communities to mitigate highway noise and to reduce the visual impact of development. Both Pi'ilani Highway and South Kihei Road shall be landscaped to achieve a parkway character.</p> | <p>✓</p> | | |
| <p>e. Provide an aesthetic landscaped entry-way and park at the north end of Kihei, north of the future commercial area. Provide a similar Kihei entry-way at Road C.</p> | | | <p>✓</p> |
| <p>f. Develop Kihei-Makena Urban Design Guidelines to address architectural, landscape, and graphic design standards. Use the guidelines to establish a sense of place by defining distinctive standards for four neighborhoods: the Uwapo Road-Suda Store neighborhood, the Lipoa Street-Azeka Place neighborhood, the Kalama Park neighborhood, and the Kama'ole Parks neighborhood.</p> | | | <p>✓</p> |
| <p>g. Implement streetscape beautification through an "adoption" program for trees, sidewalks, street frontages, and intersections.</p> | | | <p>✓</p> |
| <p>Analysis: As discussed in Section III.B.2 (Housing) the MRTP will offer a mix of single and multi-family housing types that will target a broad range of Maui residents. The MRTP will include affordable housing units in compliance with Chapter 2.96, MCC Residential Workforce housing Policy. Workforce homes will be subject to the requirements of Chapter 2.96, MCC.</p> <p>As Part of the Change in Zoning, the MRTP will modify the existing zoning ordinance that will define minimum lot sizes and establish Urban Design Standards for elements such as roadways and sidewalks to ensure a quality designed cohesive community.</p> <p>The MRTP's open spaces and parks will be landscaped with draught tolerant and native plants and shade trees to enhance the Park. Street trees will be planted along roadways and the bicycle and pedestrian network. Landscape design will be mindful of irrigation water requirements, and will use recycled water in all areas where permitted, with the Maui County Planting Plan serving as a resource for the selection of landscape planting materials for the Project's parks, open space areas, and along roadways.</p> | | | |



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| Physical and Social Infrastructure | | | |
| <p>Goal: Provision of facility systems, public services and capital improvement projects in an efficient, reliable, cost effective, and environmentally sensitive manner which accommodates the needs of the Kihei-Makena community, and fully support present and planned land uses, especially in the case of project district implementation.</p> <p>Allow no development for which infrastructure may not be available concurrent with the development's impacts.</p> | | | |
| <u>Transportation</u> | | | |
| Objectives and Policies: | S | N/S | N/A |
| a. Develop and implement a well-planned road and public transportation system to allow residents and visitors to move safely, effectively and comfortably within the region. Roadway improvements should be planned, designed, and constructed as prioritized under the Implementing Actions section below, and as generally described in the Kihei Traffic Master Plan. | ✓ | | |
| b. Undertake transportation system improvements concurrently with planned growth of the Kihei-Makena region. Require adequate interregional highway capacity, including the widening of Pi`ilani and Moku-lele Highways to four lanes, prior to the construction of major projects south of Kilohana Road or <i>mauka</i> of Pi`ilani Highway. | ✓ | | |
| c. Strengthen the coordination of land use planning and transportation planning to promote sustainable development and to reduce dependence on automobiles. New residential communities should provide convenient pedestrian and bicycle access between residences and neighborhood commercial areas, parks and public facilities. | ✓ | | |
| d. Support ridesharing, bicycle and pedestrian use, alternative work schedules, traffic signal synchronization, and/or other transportation demand management strategies. | ✓ | | |
| e. Support a new bypass highway <i>mauka</i> of Pi`ilani Highway, coordinated with a Ma`alaea-Kealia Pond bypass highway, and an Upcountry-Kihei connector road, to be constructed as growth in the region | ✓ | | |



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| warrants. | | | |
| f. Protect and preserve the traditional rural scale and character of existing portions of old Makena Road in a manner similar to that existing at Keawalai Church. | | | ✓ |
| g. Plan, design, and construct a pedestrian and bikeway network throughout the Kihei-Makena region which considers the utilization of existing stream beds, drainageways, wetlands and public rights-of-way along coastal and inland areas. | ✓ | | |
| h. Encourage joint public/private participation in the planning, design and construction of roadway improvements, especially those identified in this plan. | ✓ | | |
| i. Support the planning and design of the Ma`alaea-Kealia bypass highway in order to address potential environmental concerns of North Kihei Road, and its proximity to the shoreline. | | | ✓ |
| Implementing Actions: | S | N/S | N/A |
| a. Plan, design and construct a new Road "C", from South Kihei Road to Pi`ilani Highway, to provide an alternative connector roadway in Central Kihei, as described in the Kihei Traffic Master Plan. Said alignment shall extend in an easterly direction from its existing segment at South Kihei Road and link with Pi`ilani Highway. This is the highest priority for roadway improvements in the community plan region. | | | ✓ |
| b. Plan, design and construct appropriate sections of a new North-South Collector Road, from Uwapo Road to Keonekai Road, to facilitate improved traffic movement in Kihei proper. When selecting a specific alignment, impacting existing structures should be kept to a minimum. Consideration should be given to segments between Kaonoulu Street and Auhana Street as well as between Ke Alii Alanui and Keonekai Road. In terms of roadway improvements within the community plan region, this shall be the second priority. | | | ✓ |
| c. Widen Pi`ilani Highway, between Mokulele Highway and Wailea Ike Drive, to four lanes. In terms of roadway improvements within the community plan region, this shall be the third priority. | | | ✓ |
| d. Plan, design and construct a new Road "B", from South Kihei Road to the new North-South Collector Road, to improve internal circulation in the Central Kihei area. | | | ✓ |



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| e. Plan, design and construct a new Road "A", from Road "B" to Lipoa Street, to provide increased circulation in the Lipoa business area. | | | ✓ |
| f. Provide clear signage with adequate lighting along Pi'ilani Highway to indicate Kihei access points. Also provide a landscape buffer and bikepath on both sides of Pi'ilani Highway. | | | ✓ |
| g. Provide left turn storage lanes and acceleration/deceleration lanes on Pi'ilani Highway, and traffic signals at important intersections along South Kihei Road. | ✓ | | |
| h. Widen Mokulele Highway to four lanes. | | | ✓ |
| i. Preserve and enhance the identity of Kihei's neighborhoods by designing the north-south collector road in discontinuous segments. Work with landowners, neighborhoods, and community groups to plan and implement an adjacent but separate trail/greenway/bike path to provide non-motorized public access along the full length of the road reserve. In sections where no roadway is built, the trail/greenway/bike path may be broadened to form a neighborhood park, public access, or open space area. | | | ✓ |
| <p>Analysis: A Traffic Impact Analysis Report (TIAR) was prepared for the Project and is described in Section III.D.1 "Roadways" and in Appendix H G. The TIAR identifies the impact of the Project on the region's roadways and identifies the necessary on- and off-site roadway improvements necessary to mitigate the Project's impacts. These improvements include planned State and County CIP projects as well as improvements that will be initiated by the Park and other participating landowners in response to their development proposals.</p> <p>The gradual build-out of the Master Plan will increase traffic to and from the project site. As conditions warrant, off-site roadway improvements will be made to mitigate the impact caused by development of the MRTP. While regional growth independent of the MRTP will produce the majority of the impact to the region's roadways, MRTP will be an active partner in working with area developers, the State and County to ensure that regional roadways operate at an acceptable levels-of-service.</p> <p>In addition, the TIAR includes a number of transportation demand management strategies to reduce automobile dependence. The MRTP's non-vehicular transportation strategy includes: 1) compact and mixed-use development patterns, 2) pedestrian oriented streets integrating street trees, sidewalks, and traffic calming, 3) both striped and separated bike lanes in appropriate locations, 4) a network of greenways and parkways to facilitate mobility, and 5) pro-</p> | | | |



viding connectivity to adjacent developments, such as the Kihei High School and uses makai of Piilani Highway. The Plan also includes transportation demand management measures, including: 1) encouraging alternate work schedules and off peak hours for employment generators, and 2) supporting park and ride, ridesharing, carpooling and van pooling, regional and sub-regional shuttles.

Water Distribution

| Objectives and Policies: | S | N/S | N/A |
|---|----------|------------|------------|
| a. Provide for appropriate water source and transmission improvements concurrent with planned growth of the Kihei-Makena region. | ✓ | | |
| b. Support and expand the projected development of the Central Maui and East Maui water systems in order to meet the needs of all Maui residents. | ✓ | | |
| c. Develop water conservation, reuse and educational programs. | ✓ | | |
| d. Encourage the use of non-potable water for irrigation purposes and water features. Prohibit the use of potable water in large water features or require substantial mitigation fees. | ✓ | | |
| e. Encourage the use of plants which have a relatively low need for water. | ✓ | | |

Analysis: A Preliminary Engineering Report was prepared for the Project and is discussed in Section D3-5 (Drainage, Water and Wastewater) and in Appendices ~~X F and G~~. The Preliminary Engineering Report describes the drinking water source and transmission improvements required to service the project. These improvements will be coordinated with the County's Department of Water Supply.

MRTP is currently connected to the public drinking water system and the proposed Project will be served by the County's public water system, should the County make such drinking water available. In the event that the County does not have sufficient capacity to provide ~~po~~table drinking water, then the Applicant will coordinate with the State and County to develop a private source of water either on the property or on adjacent lands as described in Section III.A.1 (Surrounding Land Uses) of the EIS. Any source of water for the Project will be developed and managed in a manner that complies with all State and County laws.

The Project will incorporate water conservation measures to minimize ~~po~~table drinking water demand. These measures may include the use of reclaimed and brackish non-drinking water



for irrigation, use of drought tolerant plant materials, the use of efficient low flow irrigation systems and use of water conserving fixtures.

Liquid and Solid Waste

| Objectives and Policies: | S | N/S | N/A |
|--|----------|------------|------------|
| a. Coordinate improvements to sewer transmission lines and wastewater reclamation facilities to meet the needs of future population growth. Require that the Wailea Resort Company and the Wailea Makena Alliance work toward a solution that would enable the Wailea sewerage system to be dedicated to the County. | ✓ | | |
| b. Provide efficient, safe and environmentally sound systems for the reuse, recycling, and disposal of liquid and solid wastes. | ✓ | | |
| c. Reduce the reliance on injection wells for wastewater disposal. Require the use of reclaimed effluent--a procedure which is safe, economical and environmentally sound--for irrigation of golf courses, parks and landscaped areas. | ✓ | | |
| d. Encourage public awareness of the need to reduce, reuse, recycle and compost waste materials, and make composting facilities available to the public. | | | ✓ |

Analysis: As discussed in Section III.D.3 (Wastewater), the MRTP is connected to the Kihei Wastewater Reclamation Facility (WWRF) which provides treated water to the MRTP for use as irrigation water. The Elleair Golf Course and Monsanto Seed farm also utilize the treated water for irrigation. The WWRF was designed to accommodate future population growth in South Maui and has a surplus of treated R-1 effluent. The additional development proposed as part of the MRTP Master Plan would utilize available recycled water as well.

A solid waste management plan will be coordinated with the County's DEM, Solid Waste Division for the disposal of on-site and construction related waste material. After construction Maui R&T Partners, LLC will implement strategies from the County of Maui Integrated Solid Waste Management Plan (2009) for diverting solid waste from landfills. Wastes such as paper, aluminum, glass, plastic and newspaper will be recycled to the extent possible. Waste that cannot be recycled will be sent to the Central Maui Landfill in Puunene.

Drainage



| Objectives and Policies: | S | N/S | N/A |
|--|----------|------------|------------|
| a. Design drainage systems that protect coastal water quality by incorporating best management practices to remove pollutants from runoff. Construct and maintain, as needed, sediment retention basins and other best management practices to remove sediments and other pollutants from runoff. | ✓ | | |
| b. Construct necessary drainage improvements in flood prone areas. Where replacement drainage are required for flood protection, these systems shall be designed, constructed, and maintained using structural controls and best management practices to preserve the functions of the natural system that are beneficial to water quality. These functions include infiltration, moderation of flow velocity, reduced erosion, uptake of nutrients and pollutants by plants, filtering, and settlement of sediment particles. The use of landscaped swales and unlined channels shall be urged. | ✓ | | |
| c. Support the implementation of flood control projects and sediment retention basins <i>mauka</i> of Piilani Highway to address present problem areas. | ✓ | | |
| d. Minimize the increase in discharge of storm water runoff to coastal waters by preserving flood storage capacity in low-lying areas, and encouraging infiltration of runoff. | ✓ | | |
| e. Encourage the use of setbacks and flood protection areas as part of an open space pedestrian-way and bikeway network throughout the region. | ✓ | | |
| Implementing Actions: | S | N/S | N/A |
| a. Formulate a drainage master plan for Kihei-Makena that considers the cumulative impacts of existing and planned development. The master plan shall guide future development while preventing flooding and providing guidance to reduce the degradation of coastal waters. | | | ✓ |
| b. Establish a comprehensive program of improvements to the storm drainage system; implement a maintenance program; and ensure that safety, property loss, pollutant removal, and the need for comprehensive planning, are considered. | | | ✓ |
| c. Revise the County drainage rules to require that drainage system design shall not adversely affect downstream and coastal water quality. | | | ✓ |



Analysis: As discussed in Section III.D.3 (Drainage) drainage from the MRTP is not expected to have a significant adverse effect upon groundwater, downstream properties or marine waters. In accordance with the County’s “Rules for the Design of Storm Drainage Facilities” all drainage improvements will be designed to retain all Project generated runoff.

Stormwater will be collected and managed through a drainage system that will include on-site surface and sub-surface drainage basins or chambers. These systems will be designed so that there will be no increase in the peak rate of stormwater runoff leaving the property compared to existing conditions. Best Management Practices (BMP’s) will be implemented during the construction and operation phases of the development to protect coastal water quality. Temporary construction measures include but are not limited to dust screens, silt fences, filter berms, fuel containment berms, and tire cleaning pads. Construction BMP must also conform to the provisions of Chapter 20.08 – Soil Erosion and Sediment Control of the Maui County Code.

Permanent BMP are measures that are part of the project and will remain in place after the construction is completed. Permanent measures are intended to reduce storm water pollution generated from the development of the project site. The use of detention basins, grassed swales, and permanent grassing and landscaping of exposed areas will be implemented to provide a level of stormwater filtration and pollution control.

Energy and Public Utilities

| Objectives and Policies: | S | N/S | N/A |
|---|----------|------------|------------|
| a. Promote energy efficiency as the energy resource of first choice, and increase energy efficiency in all sectors of the community. | ✓ | | |
| b. Locate goods, services, and employment in close proximity to residential centers to minimize energy expenditures for transportation. Support the development of communication infrastructure and promote telecommuting to minimize travel. | ✓ | | |
| c. Increase the use of renewable resources in all County-owned buildings, facilities, and vehicles. Utilize renewable energy for water pumping or other energy services which can take advantage of intermittent energy resources. | | | ✓ |



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| d. Promote environmentally and culturally sensitive use of renewable energy resources like biomass, solar, wind, and hydroelectric energy in all sectors of the community. | ✓ | | |
| e. Support the establishment of an alternate fuels distribution infrastructure. | | | ✓ |
| f. Interface County planning with the energy utilities' integrated resource planning programs. | | | ✓ |
| g. Encourage the provision of public utilities which will meet community needs in a timely manner. | ✓ | | |
| h. Require proper site selection, facility construction and monitoring of power generation facilities in order to minimize adverse environmental impacts upon the Kihei-Makena community. | | | ✓ |
| i. Increase the energy security of community "lifeline" facilities and improve energy emergency response capabilities. | | | ✓ |
| Implementing Actions: | S | N/S | N/A |
| a. Develop incentives and requirements for energy-efficient building design and site development practices through various approaches, including modifications to building, zoning, and subdivision codes. | | | ✓ |
| b. Develop, compile and disseminate information on new energy technologies, policies, and programs that may prove helpful to the community's economy and environment. | ✓ | | |
| c. Initiate an integrated County energy resource planning program. | | | ✓ |
| d. Use energy-efficient street lights and develop appropriate street lighting standards for agricultural and rural areas. | ✓ | | |
| <p>Analysis: The MRTP is an existing employment center with adequate utilities. The implementation of the Master Plan Update will provide utilities prior to or concurrent with development. As discussed in Section D III.D.6 (Utilities) the MRTP will include energy-efficient design and conservation measures. Specifically, the design guidelines will encourage the use of energy efficient technology throughout the Park, specifically, in street lighting, air-conditioning, and building materials. Solar hot water heaters will be utilized throughout the residential portion of the development and installation of Photovoltaic Energy Systems will be encouraged in all areas of the MRTP.</p> | | | |
| <u>Recreation</u> | | | |



| Objectives and Policies: | S | N/S | N/A |
|--|---|-----|-----|
| a. Provide high-quality recreational facilities to meet the present and future needs of residents of all ages and physical ability. | ✓ | | |
| b. Provide for a range of park sizes and types at neighborhood, community and regional scales. New residential developments shall provide recreational facilities on-site to meet the immediate needs of project residents. | ✓ | | |
| c. Plan, design and construct a regional park on approximately 100-150 acres within the District. Facilities should include, but may not be limited to: a community center, swimming pool, ball fields, and basketball and tennis courts. Consideration should be given to locating the park in fairly close proximity to the Kihei Wastewater Reclamation Facility so that treated effluent may be used for park irrigation purposes. | | | ✓ |
| d. Encourage the construction of public parks adjacent to schools to provide for joint utilization of facilities by school and community. | ✓ | | |
| e. Improve recreation facilities and services through the integration of public parking, vehicular drop-offs and turnarounds, and sanitation facilities with facility planning and design. | ✓ | | |
| <p>f. Improve public access to shoreline and nearshore resources through the following measures:</p> <ol style="list-style-type: none"> 1) Develop and implement a plan for public access to the shoreline, which includes both existing and future accesses, based on the location of significant shoreline resources. Accesses shall be consistent with the characteristics of resources to be reached. 2) Provide adequate landscaped public access to shoreline areas with significant recreational and scenic value. Provide adequate lateral public access along the shoreline to connect significant shoreline areas and to establish continuity of the public shoreline areas. Particular attention shall be directed toward southern shoreline resources from Polo Beach southwards, and between Kama`ole Parks II and III. 3) Require setbacks to include recreational space on lands behind the legally defined public shoreline zone wherever possible. This allows for adequate recreational activities and proper management of the shoreline. 4) Provide setback areas with landscaping to enhance recreational use and scenic quality. Recreational amenities should be commensurate | | | ✓ |



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| with the scale of the setback area, intended use, and resource characteristics. | | | |
| g. Establish several youth centers throughout the region, one of which could be located at the park site adjacent to Lokelani Intermediate School. | | | ✓ |
| h. Provide for adequate parking at all park facilities. Many existing parks lack sufficient parking and require substantial increases in parking spaces. | ✓ | | |
| i. Support the creation and promotion of overnight campsites within the region. | | | ✓ |
| Implementing Actions: | S | N/S | N/A |
| a. Designate appropriate locations and provide for community and neighborhood parks within the Kihei-Makena region. | ✓ | | |
| b. Revise standards in the park dedication ordinance to increase the quantity and quality of parks generated by new developments. Strategies which should be explored include increasing park assessment provisions, various cash vs. land dedication options, and provision of active vs. passive recreation parks. The analysis should recognize the importance of on-site recreational facilities as well as the need for parks at the neighborhood, community and regional level. | ✓ | | |
| c. Implement Makena-LaPerouse Park for nature-oriented recreation, including shoreline activities, picnicking, camping, biking, and interpretive/educational pursuits. Provide for a residential caretaker and security personnel to oversee facilities and public safety at this large remote destination. | | | ✓ |
| d. Provide adequate maintenance programs and enforce existing regulations regarding littering and defacement of public property at all public facilities. | | | ✓ |
| e. Create a master plan to rehabilitate the existing beach parks in the region, and to develop County-owned lands designated for park use. | | | ✓ |
| Analysis: As discussed in Section II.E.3 and 4 (Proposed Action) the MRTP Master Plan Update contemplates a livable community that enhances quality of life, including the incorporation of a wide range of recreation opportunities, including mini- and neighborhood active and passive recreation parks together with an extensive open space network and unified pedestrian and bicycle system to connect these facilities with the Park's existing and future sur- | | | |



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| <p>roundings. The system will connect residential areas, neighborhood parks and employment areas. In addition, the MRTP will comply with the requirements of the Department of Parks and Recreation Parks Assessment that requires land or money for each residential unit developed.</p> | | | |
| <p><u>Health and Public Safety</u></p> | | | |
| Objectives and Policies: | S | N/S | N/A |
| a. Improve and expand the delivery of health and public safety services to Kihei-Makena residents and visitors. | ✓ | | |
| b. Provide for the establishment of a health clinic with full emergency services. | | | ✓ |
| c. Support a new full-service hospital facility in the Kihei-Makena Region to be constructed as growth in the region and the island warrants. | ✓ | | |
| Implementing Actions: | S | N/S | N/A |
| a. Provide a police station in the Kihei-Makena region. | ✓ | | |
| b. Expand fire fighting and rescue capabilities, including the acquisition of a new ladder truck, and the provision of a fire and ambulance station in the Wailea area. | ✓ | | |
| <p>Analysis: Build-out of the MRTP will increase demands upon the Police and Fire Departments. In response to the impact that new development has on these facilities the County has initiated the preparation of an impact fee ordinance that will collect monies for police and fire capital improvements. These monies will be collected from developers at the time of building permit issuance. The MRTP will work with the County to pay any such fees as required by ordinance. In addition, the MRTP will generate property tax revenue that will help fund County facilities. The primary funding source for Police and Fire facilities on Maui are property tax revenues that are deposited into the County's General Fund.</p> <p>The Master Plan Update accommodates "campus"-type uses that would be ideal for a health clinic or hospital. Additionally, the updated zoning ordinance would permit hospital or medical facility uses.</p> | | | |
| <p><u>Education</u></p> | | | |
| Objectives and Policies: | S | N/S | N/A |
| a. Require the delivery of quality educational facilities at the time such | ✓ | | |



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| facilities are needed. Emphasize advanced planning so that school facilities such as classrooms, playgrounds, libraries, cafeterias and other appurtenant structures are delivered in a timely manner so as to eliminate the use of portable facilities. | | | |
| b. Enhance the classroom learning environment through measures which would reduce excessive temperature and background noise problems. | | | ✓ |
| c. Consider a third elementary school site of approximately 20 acres in the North Kihei area. | ✓ | | |
| d. Build a high school to serve the Kihei region when required to accommodate growth. | | | ✓ |
| e. Encourage the construction of child day care centers which are located convenient to users, but which place minimal impact upon residential neighborhoods. | ✓ | | |
| Implementing Actions: | S | N/S | N/A |
| a. Enhance the classroom learning environment through such measures as the installation of air-conditioning and ceiling fans. | | | ✓ |
| b. Require the construction of a playground and physical education facilities east of Lokelani Intermediate School. Consider the joint use of property on the south side of Lokelani Intermediate School for playground use in order to provide additional recreation space and flexibility for both Lokelani and Kihei Elementary schools. | | | ✓ |
| c. Request that the Department of Education shall provide and maintain a landscaped buffer between Pi`ilani Highway and Lokelani and Kihei Elementary schools. This visually attractive buffer would reduce excessive noise problems from Pi`ilani Highway. | | | ✓ |
| d. Plan and locate a site for a high school to serve the Kihei region. | | | ✓ |
| <p><u>Analysis:</u> As discussed in Section III.C.4 (Schools) the Project site is being designed to accommodate a public and/or private elementary or intermediate school campus within the Village Center. In addition, in 2007, the Hawaii Legislature enacted Act 245 as Section 302A, HRS, "School Impact Fees". Based upon this legislation, the Department of Education has enacted impact fees for residential developments that occur within indentified school impact districts. The Project is within the boundaries of the Central Maui Impact District and is within the Makawao Cost Area of that district. Projects within the district and cost area pay a construction fee and either a fee-in-lieu of land or a land donation, at the DOE's discretion.</p> | | | |



At the appropriate time, the applicant will contact the DOE to enter into an impact fee agreement. Additionally, the MRTP site may be conducive to future higher education uses that desire an outer island location, within close proximity to one of the State's leading technology clusters. The Master Plan Update identifies potential higher education uses and incorporates sufficient space for campus-type development near the employment/technology core.

Government

Goal: Efficient, effective and responsive government services in the Kihei-Makena region.

| Objectives and Policies: | S | N/S | N/A |
|---|----------|------------|------------|
| a. Improve the delivery of services by government agencies to the Kihei-Makena region. | ✓ | | |
| b. Continue to streamline the permit process, where appropriate, through means such as consolidated public hearings and concurrent processing of applications. | ✓ | | |
| c. Continue to expedite the review and approval process for projects which will result in public benefit by "fast-tracking" and the assignment of permit expeditors. | | | ✓ |
| d. Use the County's real property tax assessment function as a mechanism to encourage desirable private development, rehabilitation, or preservation, to monitor the implementation of the Community Plan, and to establish a land use information base. | | | ✓ |
| Implementing Actions: | S | N/S | N/A |
| a. Evaluate and modify present zoning and subdivision ordinances to incorporate land use and design guidelines as well as other recommendations incorporated herein. | ✓ | | |
| b. Compile plans and studies to implement the recommendations of this Plan, including water development, housing, local and regional circulation, drainage, solid waste, and other special studies as required. | | | ✓ |
| c. Continue to develop and utilize a computerized County planning system, including, but not limited to, integrating into the system future plans, studies, guidelines, and legislation. The computerized planning system should not become stagnant, but should become an integral part of planning within the County. | | | ✓ |
| d. Continue to operate and fund mobile/satellite government facilities. | | | ✓ |



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| e. Implement tax incentives and/or disincentives that encourage desirable private development or preservation. | | | ✓ |
| f. Adopt a beach/mountain access dedication ordinance pursuant to Chapter 46, Hawaii Revised Statutes to assist in establishing public <i>mauka</i> and <i>makai</i> accesses, in conjunction with an overall public access master plan to serve as the framework for decision-making. | | | ✓ |
| <p><u>Analysis:</u> The MRTP Master Plan Update will require a modification to the existing zoning ordinance to allow for a variety of uses in the MRTP. The modified zoning ordinance will allow residential development and reduce minimum lot sizes to encourage new development within the Park. The development will improve the delivery of services by government agencies in the form of cash or land contributions for parks, schools, traffic improvements, police and fire services. As discussed in Section III.B.3 “Economy” the development will provide net returns to the State and County as follows:</p> <ul style="list-style-type: none"> • The County of Maui will realize real property, transient accommodation taxes, other secondary receipts and impact fees of \$141.3 million during the 19-year construction and absorption period and \$28.5 million annually on a stabilized basis thereafter. The net benefit to the County will be of \$25.3 million during development, and \$21.5 million annually on a stabilized basis. • The State of Hawaii will receive Gross Excise, Income, transient accommodation taxes, secondary revenues and impact fees of \$752.5 million during the build and sales projection time frame, and \$80.4 million per year thereafter. The net benefit to the State purse will be in excess of \$466.3 million during development, and a stabilized 'profit' of \$57.3 million per year. <p>In preparing the FEIS a number of professionally prepared technical studies were prepared. The data collected in these studies have been made available to the State and County for further use.</p> | | | |
| <p><u>Indigenous Architecture</u></p> | | | |
| <p><u>Goal:</u> Reserve for future implementation provisions for indigenous architecture as may be adopted from time to time by the County Council and/or the County Cultural Resources Commission.</p> | | | |



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|--|----------|------------|------------|
| Objective and Policy: | S | N/S | N/A |
| a. To legitimize indigenous architecture as viable spaces for living, work, and recreation. | | | ✓ |
| Implementing Actions: | S | N/S | N/A |
| a. Develop a County ordinance for indigenous architecture. | | | ✓ |
| b. Adopt standards for indigenous architecture. | | | ✓ |
| <u>Analysis:</u> The MRTP does not involve planning for the region's future implementation of indigenous architecture; therefore, this objective and policy are not applicable. | | | |
| <u>C. Planning Standards</u> | | | |
| Land Use Standards: | S | N/S | N/A |
| a. All zoning applications and/or proposed land uses and developments shall be consistent with the Land Use Map and Objectives and Policies of the Kihei-Makena Community Plan. | ✓ | | |
| b. Development of the Kihei Kalama Villages property identified as TMK 3-9-03:portion of 08, approximately 0.6 acres in size, shall be limited in its use for parking purposes only. | | | ✓ |
| c. Development of the Pacific Warehouse properties identified as TMK 3-9-03:33, approximately 10,000 square feet in size, and TMK 3-9-3:45, approximately 1.0 acres in size, shall be limited in its use for parking, trash compactor, and storage purposes only. | | | ✓ |
| d. Road widening adjacent to the Stinson property, identified as TMK 3-9-07:38, 39, 40, and 41, approximately 1.1 acres in size, shall occur entirely on the said Stinson property, to the extent feasible. | | | ✓ |
| e. Development of the "Chang's Beach" property, identified as TMK 2-1-12:15, approximately 1.4 acres in size, shall be compatible with Native Hawaiian cultural practices. Compatibility shall include, but not be limited to, consulting with Native Hawaiian organizations regarding the property's site plans, providing a program for cultural interpretation and education, and ensuring access for cultural practices, including complete privacy where warranted. Furthermore, a non-vehicular public access shall be provided at the western tip of the property, consisting of a 100 foot southerly ocean setback, and a 40 foot northerly ocean setback. | | | ✓ |



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| <p>f. The existing parking lot for the Wailea Shopping Village identified as TMK 2-1-08:74, approximately 5.5 acres in size, shall be limited in its use for parking purposes only.</p> | | | ✓ |
| <p><u>Analysis:</u> The MRTP Master Plan Update requires an amendment to the Kihei-Makena Community Plan map and a revised description of the Project within the Plan’s text. Modification of the Project description and amendment of the Kihei-Makena Community Plan map will allow the proposed Master Plan to be consistent with the Kihei-Makena Community Plan.</p> | | | |
| <p>Project District Standards:</p> | S | N/S | N/A |
| <p>PROJECT DISTRICT 6 (R & T Park) 385 acres The research and technology park project district is located <i>mauka</i> of Pi’ilani Highway between Waipuilani Gulch and Keokea Stream. The objective of the project district is to encourage the development of non-polluting research and technology on individual 1 to 5-acre sites planned and built in accordance with specific standards and guidelines as established by an appropriate county zoning ordinance. Design guidelines should encourage low-rise, low-density developments with ample setbacks and open space, underground utilities, and architectural and signage controls in accordance with the park’s theme</p> | ✓ | | |
| <p><u>Analysis:</u> The MRTP was established in the early 1980’s to diversify the State’s economy by encouraging research and technology based businesses to locate to Maui. It has been over 25 years since the underlying zoning documents for the Park have been updated. The updated Master Plan responds to the most current trends in the development of innovation centers nationwide. The Master Plan Update will strengthen Maui’s economy by making the MRTP a more attractive location for establishing and growing knowledge-based industries. The result will be an increase in economic activities and employment opportunities on the neighbor islands consistent with community needs and desires, which will promote increased employment and entrepreneurial opportunities. The update of the Master Plan was led by the nationally recognized planning firm Calthorpe & Associates, a pioneer in New Urbanism land planning and design. Peter Calthorpe and his staff prepared a site plan that integrates the dominant land use - employment - with diverse opportunities for housing, commercial and businesses services, as well as civic uses. The Plan reduces automobile dependency from both within and outside of the Park by creating a “complete community” where most daily needs are readily available within a five minute walk or bicycle ride.</p> | | | |



| Urban Design Standards: | | | |
|---|---|--|---|
| <p><i>a. Building Form</i></p> <p>1) Establish a maximum of thirty-five (35) feet in building height for new commercial facilities.</p> <p>2) Establish a maximum of forty-five (45) feet for multi-family development.</p> <p>3) Limit resort development throughout the region to thirty-five (35) feet in building height for sites near the shoreline. Building height limits may gradually be increased up to seventy-five (75) feet for inland resort development provided that important <i>mauka/makai</i> vistas are maintained, and impacts to coastal resources are minimized. Resort community planning and design shall integrate recreational amenities with adequate shoreline setback and public shoreline access provisions.</p> <p>4) Limit the height of industrial buildings to thirty-five (35) feet. Within large industrial tracts, separate industrial design guidelines should be formulated to guide development. Such guidelines shall, among other issues, address landscaping and building design to achieve design continuity for the overall industrial development area.</p> <p>5) All new multi-family and commercial facilities should provide a garden setting appropriate to the region. Setback requirements should be sufficient to allow for street and sidewalk climate-adapted landscaped buffers and interior planting areas.</p> | ✓ | | |
| <p><i>b. Setbacks</i></p> <p>A Coastal Erosion Rate Analysis shall be developed. Data from the analysis shall be incorporated into planning decisions for shoreline areas, especially with respect to shoreline building setbacks. In the interim period prior to the completion of the analysis, minimum setbacks for multi-family and hotel uses shall be 150 feet from sandy shorelines, and 75 feet from rocky shorelines, or 25% of the average lot depth, whichever is greater.</p> | | | ✓ |
| <p><i>c. Special Design Standards</i></p> <p>1) Establish design standards for new and existing residential, commercial, and hotel developments using the following guidelines:</p> <p>a. Establish streetscape standards that address low-cost improvements</p> | ✓ | | |



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| <p>to landscaping, lighting, signage, and intersections along South Kihei Road, Pi'ilani Highway, and all existing or proposed collector roads.</p> <p>b. Establish building design standards which promote island architecture while at the same time providing related visual and physical characteristics for the Kihei region.</p> <p>c. Set uniform right-of-way standards for connector roads and South Kihei Road.</p> | | | |
| <p><u>Analysis:</u> In order to implement the Master Plan, MCC Title 19.33 "Kihei Research & Technology Park District" will be amended to be consistent with the Master Plan's land use strategies and form-based development code and design guidelines. The amended ordinance will also be in conformance with the Special Design Standards embodied within the Kihei-Makena Community Plan.</p> | | | |

G. COUNTY ZONING

Title 19 of the Maui County Code provides comprehensive zoning for the county. The purpose and intent of this comprehensive zoning is to regulate the utilization of land in a manner encouraging orderly development and to promote and protect the health, safety and welfare of the people of the County.

The Master Plan Update will require a Change in County Zoning from Agricultural to ~~in order to bring the entire MRTP site into the Kihei Maui Research and Technology Park District (MCC Title 19.33A), whereas portions are currently zoned Agricultural~~ (See: Figure No. 7, "Maui County Zoning Map"). In addition, changes will also be sought to the language of Chapter 19.33, MCC, to allow for a more diversified development that comports with the vision of the Master Plan Update.

Pursuant to Chapter 19.510.040 Change in Zoning, of the Maui County Code a Change in Zoning may be granted by County Council provided all the following criteria are met:

1. *The proposed request meets the intent of the General Plan and the objectives and policies of the community plan of the County.*



Analysis. As discussed in Section IV.E the MRTP meets the intent of the ~~General~~ Maui Island Plan and the objectives and policies of the Kihei-Makena Community Plan. The Project site is also located entirely within the ~~Draft~~ Maui Island Plan's ~~proposed~~ Urban Growth Boundary.

2. *The proposed request is consistent with the applicable community plan land use map of the County.*

Analysis. The MRTP is designated by the Kihei-Makena Community Plan as Project District 6, "Research & Technology Park District" and "Public/Quasi-Public" (P). The Master Plan Update will require that these designations be changed to a new designation to be called "Kihei-Maui Research and Technology Park District". The new district will serve to implement the Maui Island Plan's goals, policies and objectives and will be in conformance with the land use strategy described in the Master Plan update. The District will also provide the policy direction for the update to MCC Title 19.33.

3. *The proposed request meets the intent and purpose of the district being requested.*

Analysis. As discussed, concurrently with the filing of the community plan amendment, changes will be made to Maui County Code Title 19.33, "Kihei Research & Technology Park District" to allow for mixed-use development within the Park, in accordance with the Kihei-Makena Community Plan, the Master Plan Update and an accompanying form-based development code. ~~The revisions to the zoning ordinance would be guided by the purpose and intent of the proposed Kihei Makena Community Pan "Kihei Research & Technology Park District".~~

4. *The application, if granted, would not adversely affect or interfere with public or private schools, parks, playgrounds, water systems, sewage and solid waste disposal, drainage, roadway and transportation systems, or other public requirements, conveniences and improvements.*

Analysis. As discussed in Sections III.C and D, the development of the MRTP will not adversely affect public or private schools, parks, playgrounds, or infrastructure such as drainage or transportation systems. Mitigation measures such as on-site schools and parks and the payment of applicable impact fees will help to off-set the increase in demand for these facilities created by the Project. The development will include walking and biking pathways, and on- and off-site roadway improvements to increase mobility.



Other infrastructure improvements include a drainage system that will contain on-site any increase in run-off created by the Project.

5. The application, if granted would not adversely impact the social, cultural, economic, environmental and ecological character and quality of the surrounding area.

Analysis. As discussed in Sections III.A.8 (Historical and Archaeological Resources) and III.B.3 and 4 (Economic and Cultural Resources) the Master Plan Update will not impact Historical, Archaeological or Cultural resources. However, the project will improve Maui's economy by creating short-term construction related employment and longer-term knowledge-based employment. The creation of knowledge-based employment is a key priority of the County's General Plan.

As discussed in Section III.B.3 (Economy) the MRTP is projected to generate approximately \$1.36 billion of direct capital investment into the Maui economy and will provide an estimated 70,700 "worker years" of employment and \$2.7 billion in total wages over a 20 year period. This will result in expenditures that will have a positive direct, indirect and induced impact on the County of Maui economy. During the operations phase, the MRTP will significantly increase the level of capital investment in the region which will create employment opportunities and create an economic stimulus for the region. The MRTP will provide direct employment opportunities for Maui residents and contribute to the diversification and growth of the Island's and State's economies. After "stabilization" is estimated that the Park will support 5,556 jobs with an annual payroll of about \$203.6 million.

Regarding historical and archaeological resources, the Archaeological Inventory Survey yielded a very limited number of sites which is consistent with the Barren Zone model for pre-contact settlement in the Kihei area; therefore no further archaeological work is recommended for the project area. The Cultural Impact Assessment concludes that there were no visible cultural resources, i.e. medicinal plants, shoreline resources, religious sites, or archeological resources observed on the property. Therefore it can be concluded that development of the site will not impact cultural resources on the property or within its immediate vicinity.

The MRTP is not located within the State's Special Management Area and no listed or endangered species of flora and fauna were identified on the property. During build-out



and during the operation phase Best Management Practices will be implemented to mitigate non-point source pollution to Maui's coastal resources as well as to mitigate fugitive dust impacts.

6. If the Change In Zoning application involves the establishment of an agricultural district with a minimum lot size of two acres, an agricultural feasibility study shall be required and reviewed by the Department of Agriculture and the U.S. Soil Conservation Service.

Analysis. This application does not involve the establishment of an agricultural district.

H. COASTAL ZONE MANAGEMENT

The most makai portion of the MRTP property is located approximately 1 mile (mauka) from the Pacific Ocean and is not located within the Special Management Area (SMA) boundary; however, the Applicant has provided a summary analysis of the objectives, policies, and guidelines, pursuant to HRS Chapter 205A-2 as part of the FEIS.

1. Recreational Resources

Objective: Provide coastal recreational resources accessible to the public.

Policies:

- (a) Improve coordination and funding of coastal recreational planning and management; and
- (b) Provide adequate, accessible, and diverse recreational opportunities in the coastal zone management area by:
 - (i) Protecting coastal resources uniquely suited for recreational activities that cannot be provided in other areas;
 - (ii) Requiring replacement of coastal resources having significant recreational value, including but not limited to surfing sites, fishponds, and sand beaches, when such resources will be unavoidably damaged by development; or require reasonable monetary compensation to the state for recreation when replacement is not feasible or desirable;
 - (iii) Providing and managing adequate public access, consistent with conservation of natural resources, to and along shorelines with recreational value;
 - (iv) Providing an adequate supply of shoreline parks and other recreational facilities suitable for public recreation;



- (v) Ensuring public recreational uses of county, state, and federally owned or controlled shoreline lands and waters having standards and conservation of natural resources;
- (vi) Adopting water quality standards and regulating point and non-point sources of pollution to protect, and where feasible, restore the recreational value of coastal waters;
- (vii) Developing new shoreline recreational opportunities, where appropriate, such as artificial lagoons, artificial beaches, and artificial reefs for surfing and fishing;
- (viii) Encourage reasonable dedication of shoreline areas with recreational value for public use as part of discretionary approvals or permits by the land use commission, board of land and natural resources, and county authorities; and crediting such dedication against the requirements of Section 46-6, HRS.

Analysis: The proposed update to the master plan and development of the MRTP will not restrict public recreation opportunities along the coastline because the site is approximately one (1) mile from the Pacific Ocean. As previously stated the MRTP is located mauka of Piilani Highway and will not affect the coastline. The proposed drainage system design will minimize the possibility of non-point source pollution from entering the marine environment. Adjacent gulches will not be impacted since storm runoff will be directed towards onsite retention basins strategically located throughout the site.

2. Historical/Cultural Resources

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

Policies:

- (a) Identify and analyze significant archeological resources;
- (b) Maximize information retention through preservation of remains and artifacts or salvage operations; and
- (c) Support state goals for protection, restoration, interpretation, and display of historic structures.

Analysis: As part of the EIS an Archeological Inventory Survey (AIS) was conducted on the property. The AIS located a total of five (5) sites, three (3) on Parcel 17 and two (2) on the portion of Parcel 54. All sites identified by the AIS have been assessed as significant under only Criterion D (i.e., information content).



In a letter dated October 27, 2008 the State Historic Preservation Division determined that the AIS was acceptable and recommended that Site -6241 should be bordered by a protective orange construction fencing prior to ground altering disturbance within TMK: (2) 2-2-024:017. (See: Appendix D1) The Applicant has agreed to provide protective fencing as indicated by the SHPD, prior to ground altering disturbance. The project is not expected to have an adverse impact upon archaeological or historical resources.

3. Scenic and Open Space Resources

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

Policies:

- (a) Identify valued scenic resources in the coastal zone management area;
- (b) Ensure that new developments are compatible with their visual environment by designing and locating such developments to minimize the alteration of natural landforms and existing public views to and along the shoreline;
- (c) Preserve, maintain, and where desirable, improve and restore shoreline open space and scenic resources; and
- (d) Encourage those developments that are not coastal dependent to locate in inland areas.

Analysis: The proposed MRTTP master plan features several park-like open spaces, landscape trees, and elevated viewpoints above the Elleair Maui Golf Club and Piilani Highway. Impacts to views of the Pacific Ocean from Kula will not be affected. Impacts to views of Haleakala from Piilani Highway and other makai properties will be minimized by limiting the height of buildings to ~~forty-five (45)~~ fifty (50) feet. The plan will concentrate density around the existing MRTTP in order to minimize the building mass as viewed from Piilani Highway. The parking areas, and designated park open spaces located between clusters of buildings will provide visual corridors throughout the MRTTP. Attractive landscape planting and site planning will ensure a quality project that complements the existing urban design character of the MRTTP area.

4. Coastal Ecosystems

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

Policies:



- (a) Exercise an overall conservation ethic, and practice stewardship in the protection, use, and development of marine and coastal resources;
- (b) Improve the technical basis for natural resource management;
- (c) Preserve valuable coastal ecosystems, including reefs, of significant biological or economic importance;
- (d) Minimize disruption or degradation of coastal water ecosystems by effective regulation of stream diversions, channelization, and similar land and water uses, recognizing competing water needs; and
- (e) Promote water quantity and quality planning and management practices that reflect the tolerance of fresh water and marine ecosystems and maintain and enhance water quality through the development and implementation of point and non-point source water pollution control measures.

Analysis: The MRTTP is located approximately 1 mile from the shoreline; therefore the proposed project is expected to have minimal impact on the coastal ecosystem. The proposed drainage design will minimize the possibility of non-point source pollution from entering the marine environment. Adjacent gulches will not be impacted since storm runoff will be directed towards onsite retention basins strategically located throughout the site.

Furthermore, the incorporation of mitigation Best Management Practices during construction will minimize the potential for short term adverse impacts.

5. Economic Use

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

Policies:

- (a) Concentrate coastal dependent development in appropriate areas;
- (b) Ensure that coastal dependent development such as harbors and ports, and coastal related development such as visitor facilities and energy generating facilities, are located, designed, and constructed to minimize adverse social, visual, and environmental impacts in the coastal zone management area;
- (c) Direct the location and expansion of coastal dependent developments to areas presently designated and used for such development and permit reasonable long-term growth at such areas, and permit coastal dependent development outside of presently designated areas when:
 - (i) Use of presently designated locations is not feasible;
 - (ii) Adverse environmental impacts are minimized; and
 - (iii) The development is important to the State's economy.



Analysis: The MRTP was the vision of a core group of community leaders in the early 1980's who sought to diversify the economic and employment base on Maui beyond tourism and agriculture. These efforts to diversify Maui's economy by creating the requisite infrastructure (like the MRTP) were made possible via public/private alliances, and the MRTP is now the locus for technological activity for the Maui community.

Since its inception approximately 180,000 square feet of Class A office, laboratory, and data center space has been developed. An estimated \$100-\$150 million a year in revenue flows through the Park's businesses and projects. The Park and all its current buildings and associated infrastructure represent an estimated \$60 Million investment.

Approximately 400 people work in the Maui Research & Technology Park at over 20 companies. Among others, the Park is home to Akimeka, Boeing, the Maui High Performance Computing Center, the Joint Information Technology Center, and Pacific Defense Solutions. Park companies work in a variety of sectors, including optics, directed energy, data fusion, space surveillance/situational awareness, software development, and professional services.

However, even with these achievements, the breadth and depth of employment opportunities is significantly less than what more modern and progressively planned parks' are capable of delivering. The current Maui Research & Technology Park is simply too inflexible to fully respond to the needs of an increasingly diverse high technology industry. The Park's current 2-acre minimum lot size makes it cost prohibitive for many small businesses to enter the Park. And, at the other end of the spectrum, fully entitled lots of sufficient size are not readily available for large campus type users. If such a user was to desire a lot in the Park, years of costly entitlement processing would be required before the campus could be developed.

The general approach being proposed utilizes the principles of New Urbanism and Smart Growth to transform the current, single-use large lot research and technology campus into an integrated and vibrant mixed-use community focused around a regional knowledge-based industry employment base.

6. Coastal Hazards

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

Policies:



- (a) Develop and communicate adequate information about storm wave, tsunami, flood, erosion, subsidence, and point and non-point source pollution hazards;
- (b) Control development in areas subject to storm wave, tsunami, flood, erosion, subsidence, and point and non-point pollution hazards;
- (c) Ensure that developments comply with requirements of the Federal Flood Insurance Program; and
- (d) Prevent coastal flooding from inland projects.

Analysis: According to the Flood Insurance Rate Map No. 1500030586E (See: Figure No. 5) for this region, the majority of the project site is situated within Flood Zone X, which is subjected to minimal flooding.

A designed drainage system has been created to collect storm runoff from the development of the MRTTP. The increased surface runoff will be retained in surface retention ponds and gradually released at a rate not to exceed current flows.

Therefore, the subject property should not have an adverse impact on neighboring properties with regards to flood hazard potential.

7. Managing Development

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

Policies:

- (a) Use, implement, and enforce existing law effectively to the maximum extent possible in managing present and future coastal zone development;
- (b) Facilitate timely processing of applications for development permits and resolve overlapping of conflicting permit requirements; and
- (c) Communicate the potential short and long-term impacts of proposed significant coastal developments early in their life cycle and in terms understandable to the public to facilitate public participation in the planning and review process.

Analysis: The MRTTP is not a coastal development and is located outside of the SMA, approximately 1 mile from the Ocean. It is not anticipated to negatively impact the management of coastal resources in the SMA. The project team has conducted public informational meetings and will continue to do so in the future to facilitate public participation in the planning and review process.



8. Public Participation

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

Policies:

- (a) Promote public involvement in coastal zone management processes;
- (b) Disseminate information on coastal management issues by means of educational materials, published reports, staff contact, and public workshops for persons and organizations concerned with coastal issues, developments, and government activities; and
- (c) Organize workshops, policy dialogues, and site-specific mediations to respond to coastal issues and conflicts.

Analysis: In addition to numerous meetings with various groups of project stakeholders, the project team held an advertised meeting open to the public in December 2009, and a public meeting with the Kihei Community Association on November 16, 2010. The meeting was held at the MRTP and provided an opportunity for the community to talk with the project team and provide feedback about the proposed master plan.

9. Beach Protection

Objective: Protect beaches for public use and recreation.

Policies:

- (a) Locate new structures inland from the shoreline setback to conserve open space, minimize interference with natural shoreline processes, and minimize loss of improvements due to erosion;
- (b) Prohibit construction of private erosion-protection structures seaward of the shoreline, except when they result in improved aesthetic and engineering solutions to erosion at the sites and do not interfere with existing recreational and waterline activities; and
- (c) Minimize the construction of public erosion-protection structures seaward of the shoreline.

Analysis: The MRTP is located approximately one (1) mile (mauka) from the Pacific Ocean and therefore the proposed expansion of the MRTP is not anticipated to negatively impact beaches for public use or recreation.

10. Marine Resources

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

Policies:



- (a) Ensure that the use and development of marine and coastal resources are ecologically and environmentally sound and economically beneficial;
- (b) Coordinate the management of marine and coastal resources and activities to improve effectiveness and efficiency;
- (c) Assert and articulate the interests of the State as a partner with federal agencies in the sound management of ocean resources within the United States exclusive economic zone;
- (d) Promote research, study, and understanding of ocean processes, marine life, and other ocean resources in order to acquire and inventory information necessary to understand how ocean development activities relate to and impact upon ocean and coastal resources; and
- (e) Encourage research and development of new, innovative technologies for exploring, using, or protecting marine and coastal resources. [L 1977, c 188, pt of §3; am L 1993, c 258, §1; am L 1994, c 3, §1; am L 1995, c 104, §5; am L 2001, c 169, §3]

Analysis: As previously stated the MRTP is located approximately 1 mile (mauka) from the Pacific Ocean. The drainage system will retain stormwater runoff on site in above ground basins and in subsurface chambers to capture any increase in run-off created by the Project. Best Management Practices (BMP's) will be implemented during the construction and operation phases of the development to protect coastal water quality. Construction BMP are temporary measures installed before commencement of construction and removed after the site has been stabilized and the permanent measures are in place. Temporary construction measures include but are not limited to dust screens, silt fences, filter berms, fuel containment berms, and tire cleaning pads. Construction BMP must also conform to the provisions of Chapter 20.08 - Soil Erosion and Sediment Control of the Maui County Code.

Permanent BMP are measures that are part of the project and will remain in place after the construction is completed. Permanent measures are intended to reduce storm water pollution generated from the development of the project site. The use of detention basins, grassed swales, and permanent grassing and landscaping of exposed areas will be implemented to provide a level of stormwater filtration and pollution control. (Section II.D.3, Drainage, contains the full discussion.)



V. CONTEXTUAL ISSUES

A. RELATIONSHIP BETWEEN SHORT-TERM USES AND MAINTENANCE OF LONG-TERM PRODUCTIVITY

Short-term uses and long-term productivity consists of short-term construction activities related to the build-out of the Park and the long-term benefits of these activities.

Construction activities would result in short-term impacts involving temporary and permanent alteration of land for grading, site work, infrastructure and building. Localized degradation of air quality and increased noise levels would also occur in the short-term due to construction-related activities. Many short-term impacts can be avoided or mitigated by implementation of construction BMP's. Applicable BMP's include implementing erosion control measures, directing storm water run-off to detention/retention basins, and preventing the release of fuel or other contaminants. The tradeoffs among these short-term impacts are the increase in employment and immediate economic benefits of construction-related activities. These short-term impacts and benefits are documented in Section II.B of the FEIS.

In the long-term, the infrastructure and building construction conforming to the Master Plan Update would facilitate the diversification of Maui's economy towards higher-paying jobs in knowledge-based industries. Economic diversification and the creation of "living wage jobs" are key objectives of Maui County's ~~draft~~ Maui Island Plan and County-wide Policy Plan.

Ultimately, the long-term build-out of the Park will produce impacts that must be weighed against the Project's benefits. Increased development will lead to an increase in population of the immediate area, whether in the form of residents living within the Park or employees commuting to the Park during regular business hours. With the pro-



jected population increases, the volume of traffic coming in and out of, and passing through the Park will increase. This will affect regional traffic conditions by increasing volumes on the region's existing roadway network. As documented in Section II.D.1 of the ~~D~~ FEIS, creative strategies involving roadway improvements and upgrades, transportation demand-management counter-measures, and innovative urban design approaches are required to mitigate the Project's traffic impact. Likewise, an increase in population will produce greater demands upon the island's ~~potable~~ drinking water resources, wastewater systems and public facilities including parks, schools, police and fire. These impacts and the necessary mitigative counter-measures are thoroughly documented in Sections III.C and D of the ~~D~~ FEIS.

With regard to long-term productivity, this Master Plan Update utilizes the principles of New Urbanism and Smart Growth to transform the current, single-use large lot research and technology campus into an integrated and vibrant mixed-use community focused around a regional knowledge-based³⁵ employment base. While the current Park tenants provide a high-quality foundation on which to build, implementation of this vision will require a broadening of the development standards to allow smaller lots sizes for the use of smaller firms and of the list of permitted knowledge based employment uses, professional services, restaurants, neighborhood serving retail, and housing. The Update aligns with the current ~~draft of the~~ *Maui Island Plan* which supports the continued expansion of the MRTP, and specifically encourages future development using the urban planning best practices at the heart of the master plan update.

The approach has been developed following extensive research into successful employment centers in other locations. The research indicates that knowledge based industries are attracted to locations offering not only office and lab space, but support services and amenities, including a mix of workforce housing opportunities for employees; commercial, retail, and professional services; and parks and open spaces. The result is a "community of innovation" as described by the Association of University Research Parks.

³⁵ Industries characterized by highly-skilled workers in fields such as science and research, biotechnology, clean technology, information technology, disaster mitigation, education, healthcare and medicine, media production, and professional services and similar knowledge based organizations.



A more economically sustainable and robust MRTP will create high-paying jobs both directly within the Park and outside of the Park in supporting industries. The economic impacts associated with the short and long-term implementation of the MRTP are thoroughly documented in Section III.B.3 of the FEIS.

B. IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES

Implementation of the Master Plan will result in the irreversible and irretrievable commitment of certain natural and fiscal resources. Major resource commitments include the land and capital, construction materials, non-renewable resources, labor, and energy required for the Plan's implementation. Impacts represented by the commitment of these resources must be weighed against the positive socio-economic benefits that could be derived from the project versus the consequences of either taking no action or pursuing another less beneficial use of the area.

When fully built out, the development will be updated from the current, single-use large lot research and technology campus into an integrated and vibrant mixed-use community focused around a regional knowledge-based³⁶ employment base.

As with any construction activity, nonrenewable resources such as fossil fuel and construction material will be irrevocably committed. Labor will be required for planning, engineering, and construction. New residential, commercial, or employment uses will generate increases in the demand for water, electricity, and sewer services. Similar types of developments proposed on other parts of Maui will also generate demand for these resources. Chapter III of the FEIS documents the Project's short- and long-term impacts.

³⁶ Industries characterized by highly-skilled workers in fields such as science and research, biotechnology, clean technology, information technology, disaster mitigation, education, healthcare and medicine, media production, and professional services and similar knowledge based organizations.



C. CUMULATIVE AND SECONDARY IMPACTS

Cumulative impacts are defined as the impact on the environment, which results from the incremental impact of an action when added to other past, present, and reasonably foreseeable future actions, regardless of what agency or person undertakes such other actions.

Secondary impacts are those that have the potential to occur later in time or farther in the future, but which are reasonably foreseeable. They can be viewed as actions of others that are taken because of the presence of the project. Secondary impacts from highway projects, for example, can occur because they can induce development by removing transportation impediments to growth.

The gradual build-out of the MRTP is likely to affect the businesses and residents within the Park together with all of the residents of Kihei. Implementation of the Master Plan, when added to other adopted and proposed projects, may have a significant affect on a regional scale, and at the island-wide scale.

As described in Sections I.A and F of the FEIS, the MRTP has been planned for urbanization since the mid-1980's. Nearly the entire property is designated Project District 6 (R&T Park) by the Kihei-Makena Community Plan, with a relatively small area designated Public/Quasi-Public. The entire project area is located within the ~~draft~~ Maui Island Plan's Urban Growth Boundary. This area is to receive a substantial portion of the island's employment over the next 20 years.

There are several other projects planned for the Kihei-Makena area over the next decade, some of which are in close proximity of the proposed project. According to the Department of Planning's *Socio-Economic Forecast* (2006), the 2005 Kihei-Makena resident population was 25,609 persons and was forecasted to reach 28,114 persons by 2010 and 38,757 persons by 2030. The de facto population of the Kihei-Makena region is estimated to be 49,735 people in 2010 and 71,908 people in 2030. Taken together, regional population growth will increase demand on natural resources, infrastructure and public facility systems. To better manage the island's growth and its related impacts, the County's draft Maui Island Plan identifies appropriate locations for development to occur. The Maui Island Plan may allow for the private and public sectors to better plan for and coordi-



nate the delivery of infrastructure and public facilities systems in response to forecasted population growth.

As a precursor to preparing the Maui Island Plan, the County of Maui prepared the following infrastructure and public facility technical studies: Infrastructure and Public Facilities Issue Paper (September 2007), Public Facilities Assessment Update (March 2007) and Infrastructure Assessment Update (May 2003). These studies assess the impact of population growth on the island's infrastructure and public facility systems. In general, the studies conclude that on-going public and private sector investment will be necessary to accommodate growth through 2030.

This section identifies secondary and cumulative impacts that may result from the phased development of the MRTP:

Impacts to Natural and Environmental Resources

Assuming all BMPs and mitigation measures documented in this $\text{\textcircled{D}}$ FEIS are implemented and all permit-induced requirements are complied with, no cumulative or secondary impacts are anticipated on the natural environment.

Flora and Fauna. Development of the MRTP, together with other area projects, could have cumulative and/or secondary impacts on rare or endangered species of flora and fauna if natural habitats and/or species are directly or indirectly disturbed. As documented in Section III.A.5 of the $\text{\textcircled{D}}$ FEIS, the Project will not impact rare or endangered flora and fauna species. Adjacent proposed developments will be required to conduct flora and fauna surveys prior to development. These surveys will be reviewed by the U.S. Fish and Wildlife Service and mitigation counter-measures will be required if warranted. In consideration of existing State and Federal regulations to protect rare and endangered species, there should be no significant cumulative and/or secondary impacts to flora and fauna resources arising from planned growth in the area.

Coastal Water Quality. Development of the MRTP, together with other area projects, could have significant cumulative impacts to coastal water quality if BMP's are not strictly adhered to. During the construction phase, BMP's must be implemented to mitigate runoff of bare soils and other construction contaminants into drainageways and



culverts. If not properly mitigated, the cumulative impact of these contaminants could impact coastal water quality.

During the Project's operation phase, any increase in runoff will be maintained on site as required by the County's drainage rules (See: Section III.D.3) Maintaining runoff on-site, together with filtration of contaminants from runoff, will mitigate the Project's impact to coastal waters. Likewise, future developments in the area will be required to implement similar mitigation measures as part of their operation phase BMP's. Therefore the Project, together with other planned projects in the area, should not have a significant cumulative impact on coastal water quality if construction and operation phase BMP's are strictly adhered to.

Agricultural Lands. As documented in Section III.A.11 of the DE FEIS, development of the MRTP, together with proposed development of Haleakala Ranch grazing lands mauka of Piilani Highway, could result in the development of about 419 acres, (102 acres for the MRTP project and 317 acres for other projects). Cumulatively, the 419 acres represents about 1.8% of ranch grazing lands. The Project, together with future urbanization of ranch lands in the area, will result in a small loss of the large supply of low-quality agricultural land on Maui, but will not affect the supply of good farmland of which there is also a large supply. Therefore, the project, together with other area developments, is not expected to have a significant cumulative impact upon the long-term viability or growth of agriculture on Maui.

In regards to secondary impacts, urban development can impact agricultural land uses in two ways. First, in certain circumstances, urbanization of agricultural lands can cause agricultural lands prices to go higher making it more cost prohibitive for farmers to buy or lease land to farm. Second, urban development can create use conflicts between farmers and urban residents. In regards to the first issue, the establishment of Urban Growth Boundaries in the Maui Island Plan will help to create more predictable development patterns and this will create more certainty in the urban and agricultural land markets; thereby, mitigating the escalation of agricultural land values. In regards to the second issue, HRS, Chapter 165 "Hawaii Right to Farm Act" protects farmers from lawsuits filed by residents living within close proximity of agricultural operations. Future residents of the MRTP will continue to be notified prior to the purchase of property that ranching activities will occur on abutting agricultural lands. In addition, the MRTP will



establish landscape planting around the perimeter of the property with a buffer to mitigate potential agricultural use conflicts.

Potable Drinking Water Resources. The MRTP is currently served by the County of Maui public water system and continued use of the public drinking water system is the preferred choice for the MRTP. The development of the MRTP, together with other area projects, will increase the demand for potable drinking water. The County of Maui's Infrastructure and Public Facilities Issue Paper (September 2007) and Infrastructure Assessment Update (May 2003) analyze the impact of population growth on the County's drinking water source and delivery systems. Moreover, the Water Use and Development Plan, now being prepared by the County's Department of Water Supply, will more thoroughly address the issue.

The development of the MRTP site is also not anticipated to negatively impact the County's potable drinking ground waters. A drinking water source development study was conducted and is included in Appendix J I. Should County drinking water not be available, the project anticipates sourcing its drinking waters from on- or off-site wells drawing brackish groundwater from the Kamaole Aquifer. The pumpage from the wells will be well within the State Commission on Water Resources Management's (CWRM's) definition of the sustainable supply for such as aquifer. In addition, the subject wells should have minimal impact on the quality of the region's ground water resources. It is anticipated that the subject development may produce a slight increase in nitrogen of between 0.8 to 0.9 percent and in phosphorus of .03 to .04 percent, which should produce minimal impact to ground water quality. Any source of water for the project will be developed and managed in a manner that complies with all State and County laws. In developing the property, Best Management Practices will be incorporated to mitigate potential impacts to the State's freshwater and estuarine environment.

Existing State and County water policies and plans are designed to protect Maui's drinking water resources from over pumping. With these measures in place, significant cumulative and/or secondary impacts are not anticipated to threaten the long-term sustainability of the County's water resources.

Air Quality. The cumulative impact of the build-out of the MRTP, together with other developments in Kihei, will increase the amount pollutants entering the atmosphere. These pollutants will be generated by an increase in demand for energy in the form of



transportation fuels for automobiles and carbon-based fuels to power the Ma'alaea Power Plant.

Impacts to the Socio-Cultural Environment

The development of the MRTP, together with other developments in Kihei, will increase population, create jobs, and generate tax revenues. Together, these projects will also increase the demand for housing and place increasing demands on infrastructure and public facility systems both locally and island-wide.

According to the ~~draft~~ Maui Island Plan, there will be a demand for an additional 34,637 housing units on Maui through 2030. The County of Maui's Land Use Forecast (November 2006) forecasted that there will be a demand for an additional 9,735 units in Kihei-Makena through 2030. The 1,250 units proposed at the Park are approximately 13% of the forecasted Kihei-Makena demand. The proposed project together with other planned projects in Kihei, are a necessary source of housing to accommodate the forecasted population growth.

The continued build-out of Kihei will also change the area's urban design character and sense of place. Today, Kihei is a developing community with a number of undeveloped infill parcels intermixed with lower and medium-density residential, strip commercial, industrial, resort and public facility uses. In the coming years, pursuant to the land-use policies contained in the draft Maui Island Plan and Kihei-Makena Community Plan, Kihei will evolve to become a more unified and cohesive urban settlement. Urban development will likely become more compact, mixed-use and interconnected. Networks of open-space, parks, bikeways, trails and pedestrian-oriented streets will link districts and neighborhoods together. An increase in population, including population created by the MRTP, may increase demand for coastal and inland active and passive recreation lands. The County's Infrastructure and Public Facilities Issue Paper (September 2007) recommends a pro-active public-sector strategy to acquire additional shoreline and inland park lands to accommodate the increasing demand for recreation and shoreline-based cultural activities. MCC Title 18.16.320 requires a park land dedication, or cash-in-lieu fee, to mitigate the impact of growth on park and recreation facilities.



Infrastructure and Public Facilities

The phased build-out of the MRTP, together with other developments in Kihei, will increase population; thereby, increasing the demand for infrastructure and public facility systems, including drinking water, wastewater, and roadways; solid waste, schools, and parks; and medical facilities, public transit and government offices. The County’s Infrastructure and Public Facilities Issue Paper (September 2007) documents the impact of projected population growth on the County’s infrastructure and public facility systems by region and identifies associated capital improvement projects to support this growth.

As documented in Section III.D of the ~~DE~~ FEIS, the MRTP will mitigate its impact on infrastructure and public facility systems through a variety of on- and off-site infrastructure and public facility counter-measures. One such counter measure, as documented in Section III.D.1 of the ~~DE~~ FEIS, is the development of a north-south bypass roadway mauka of Piilani Highway to accommodate the cumulative impact of projected population growth. Property taxes generated by the development, together with other planned projects in the area, will help fund County operations and capital improvement projects.

Secondary impacts could also result from investments into infrastructure and public facility improvements to support the Project. For example, development of the mauka-bypass road may induce further growth mauka of Piilani Highway. As documented in Section III.D.1 of the ~~DE~~ FEIS, development mauka of Piilani Highway, together with the mauka-bypass roadway, is supported by ~~the current draft of~~ the Maui Island Plan.

D. UNRESOLVED ISSUES

| <u>Table 1-1 Unresolved Issues</u> | | |
|--|--|-----------------------------|
| <u>Issue</u> | <u>Parties Involved</u> | <u>Estimated Resolution</u> |
| <u>Boundary Amendment Petition Docket No. A84-585)</u> | <u>MRTP, LUC, Office of State Planning</u> | <u>2013</u> |
| <u>New Zoning</u> | <u>MRTP, County of Maui De-</u> | <u>2013</u> |



| | | |
|-----------------------|--|-------------|
| <u>Ordinance</u> | <u>partment of Planning, Maui Planning Commission and Maui County Council.</u> | |
| <u>Drinking Water</u> | <u>MRTP, County of Maui DWS</u> | <u>2014</u> |
| <u>Mauka Roadway</u> | <u>MRTP, County of Maui, DPW, DP, DOT. State of Hawaii DOT.</u> | <u>2015</u> |

Boundary Amendment Petition Docket No. A84-585

On November 9, 1984, Maui Economic Development Board, Inc. filed its Petition for District Boundary Amendment with the Land Use Commission, State of Hawaii ("LUC") to reclassify approximately 300 acres of land in Kihei, Maui from the agricultural district to the urban district to develop a high technology park in LUC Docket No. A84-585. The Applicant will request amendment to Docket No. A84-585 in order to make the project description consistent with the new Master Plan update.

Potable Drinking Water Source.

As documented in Section III.D.4 of the DE FEIS, the MRTP is currently served by the County of Maui public drinking water system and continued use of the public drinking water system is the preferred choice for the MRTP. However, MCC Chapter 14.12 requires that a long-term and reliable supply of drinking water be available prior to subdivision approval. According to MCC Section 14.01.040 a long-term and reliable source of drinking water is determined by the issuance of a County water meter reservation or verification that a privately developed source will meet the needs of the proposed development. Since the County will not issue water meter reservations until the issuance of building permits, which requires subdivision approval, the Project can not demonstrate that County drinking water will be available. Therefore, the MRTP will pursue development of a private on- or off-site water system. However, the MRTP will continue to work with the County to determine if County water can be committed to the project in lieu of a privately developed source (See: Section III.D.4).



Mauka North-South Collector Road

As described in Section III.D.1 of the FEIS, planned and projected growth in Kihei-Makena to 2034, without Phase II of the Project, will trigger the need for a new north-south collector roadway mauka of Piilani Highway that intersects with the planned Mokulele Highway, crosses the planned Upcountry Highway and intersects with Piilani highway south of MRTP. The schedule for development of this roadway, appropriate cost sharing and funding sources are uncertain at this time. These issues will be resolved as the need for the roadway becomes more imminent.

Amendments to Maui County Code (MCC) Chapter 19.33

Implementation of the Master Plan will require amendments to MCC Chapter 19.33. These amendments will relate to the types of uses permitted in the Park, density of development, building massing, parking requirements, etc. It is not yet known whether these amendments will be adopted through the legislative process. Should the amendments not be adopted, or be revised significantly, then the ultimate mix of land uses and character of development may be affected.



VII. REFERENCES

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VIII. CONSULTATION AND REVIEW

A. EARLY CONSULTATION

Prior to the preparation of this Notice, consultation on the project was undertaken with the following agencies and groups:

| | |
|------------------|--|
| February 3, 2009 | Department of Planning, Director and Long-Range Division staff |
| July 21, 2009 | Presentation to the Maui Planning Commission regarding <i>Maui Island Plan</i> Urban Growth Boundaries |
| October 27, 2009 | Kihei Community Association Planning Committee to discuss Master Planning Process and Project Objectives |
| October 27, 2009 | Maui Economic Development Board (MEDB) to discuss Master Planning Process and Project Objectives |
| October 28, 2009 | Department of Planning, Director and Long-Range Division staff |
| October 28, 2009 | Haleakala Ranch to discuss plans for the ranch lands to the north and east of the project |
| Dec 15, 2009 | Presentation of Conceptual Project Plans to the Maui Tech Ohana technology industry association |
| Dec 15, 2009 | Presentation of Conceptual Plans to the Department of Planning, Director and Long-Range Division staff |



| | |
|-------------------|---|
| Dec 16, 2009 | Presentation of Conceptual Plans to Montessori Schools and Kihei Charter School |
| Dec 16, 2009 | Presentation of Conceptual Plans to the Kihei Community Association Planning Committee |
| Dec 16, 2009 | Presentation of Conceptual Plans to Haleakala Ranch |
| Dec 16, 2009 | Presentation of Conceptual Plans to MEDB stakeholder group including current tenants of MRTTP |
| November 16, 2010 | Presentation of Master Plan Update to Maui County Urban Design Review Board |
| November 16, 2010 | Presentation of Master Plan Update to Kihei Community Association (KCA) General Membership |
| November 16, 2010 | Presentation of Master Plan Update to Maui Economic Development Board |
| November 17, 2010 | Presentation of Master Plan Update to Department of Planning Director and Long-range Planning Staff |
| November 17, 2010 | Presentation of Master Plan to Haleakala Ranch |

Additionally, there has been consultation with the State Department of Education regarding integrating the project with the proposed South Maui High School.

B. EIS PREPARATION NOTICE DISTRIBUTION

This EIS Preparation Notice was transmitted to the following agencies and organizations for review and comment:



Federal Agencies

U.S. Department of Agriculture, Natural Resources Conservation Service
U.S. Army Engineer Division
U.S. Fish and Wildlife Service

State Agencies

Department of Agriculture
Department of Accounting and General Services
Department of Business, Economic Development & Tourism (DBEDT)
DBEDT - Energy Division
DBEDT - Office of Planning
Department of Education
Department of Hawaiian Home Lands
Department of Health
Department of Human Services
Department of Labor and Industrial Relations
Department of Land and Natural Resources (DLNR)
DLNR - Historic Preservation Division
Department of Transportation
Hawaii Housing Financing and Development Corporation
Office of Hawaiian Affairs
University of Hawaii, Environmental Center

County Agencies

Department of Environmental Management
Department of Fire and Public Safety
Department of Housing and Human Concerns
Department of Parks and Recreation
Department of Planning
Department of Public Works
Department of Transportation
Department of Water Supply
Police Department



C. EIS EARLY CONSULTATION COMMENT & RESPONSE LETTERS

An early consultation letter was transmitted to the following agencies and organizations for review and comment. Table ~~26~~ 27 below identifies comments received and corresponding response letters.

Federal Agencies

Natural Resources Conservation Service
US Army Engineer Division
US Fish and Wildlife Service

State Agencies

Department of Agriculture
Department of Accounting and General Services
Department of Bus, Econ. Dev. and Tourism
DBEDT - Energy Division
DBEDT - Office of Planning
Department of Education
Department of Hawaiian Home Lands
Department of Health
Department of Human Services
Department of Labor and Industrial Relations
Department of Land and Natural Resources
DLNR - Historic Preservation Division
Department of Transportation
Hawaii Housing Financing and Development Corporation
Office of Hawaiian Affairs
UH Environmental Center

County Agencies

Department of Environmental Management
Department of Fire and Public Safety
Department of Housing and Human Concerns
Department of Parks and Recreation



Department of Planning
 Department of Public Works
 Department of Transportation
 Department of Water Supply
 Police Department

Other

Maui Electric Company
 Hawaiian Telcom

Table 26 27, Early Consultation Comment & Response Letters

| Date | Agency | Date of Response |
|--------------------|---|-------------------------|
| September 10, 2010 | University of Hawaii, Environmental Center | November 29, 2011 |
| September 29, 2010 | County of Maui, Department of Transportation | June 10, 2011 |
| September 30, 2010 | State of Hawaii, Department of Land and Natural Resources, Division of Forestry & Wildlife | June 12, 2011 |
| October 1, 2010 | Department of the Army U.S. Army Engineer District | October 25, 2011 |
| October 4, 2010 | Department of Planning | November 29, 2011 |
| October 5, 2010 | State of Hawaii, Department of Land and Natural Resources, Commission on Water Resources Management | June 12, 2011 |
| October 5, 2010 | Maui Electric Company, Ltd. | June 10, 2011 |
| October 12, 2010 | State of Hawaii, Department of Land and Natural Resources, Division of State Parks | June 12, 2010 |
| October 12, 2010 | State of Hawaii, Department of Land and Natural Resources, Engineering Division | June 10, 2011 |
| October 12, 2010 | State of Hawaii, Department of Health, Maui District Health Office | June 12, 2011 |
| October 12, 2010 | Department of Parks & Recreation | June 10, 2011 |
| October 15, 2010 | County of Maui, Department of Environmental Management | June 12, 2011 |
| October 15, 2010 | State of Hawaii, Department of Education | June 12, 2011 |
| October 18, 2010 | County of Maui, Department of Housing and Human Concerns | June 10, 2010 |
| October 20, 2010 | State of Hawaii, Department of Transportation | October 25, 2011 |
| October 20, 2010 | State of Hawaii, Department of Health, Clean Water Branch | October 27, 2011 |
| October 20, 2010 | County of Maui, Department of Fire and Public | June 12, 2011 |



| | | |
|-------------------|--|--------------------------------------|
| October 21, 2010 | Safety, Fire Prevention Bureau State of Hawaii, Department of Land and Natural Resources, Land Division | June 10, 2011 |
| October 23, 2010 | County of Maui, Police Department | June 10, 2011 |
| October 26, 2010 | State of Hawaii, Department of Hawaiian Home Lands | October 25, 2011 |
| October 27, 2010 | State of Hawaii, Office of Hawaiian Affairs | June 10, 2011 |
| October 28, 2010 | United States Department of the Interior, Fish and Wildlife Service | April 27, 2011 |
| November 4, 2010 | County of Maui, Department of Public Works | November 29, 2011 |
| November 23, 2010 | County of Maui, Department of Water Supply | November 30, 2011 |
| June 7, 2011 | United States Department of the Interior, Fish and Wildlife Service | October 25, 2011 January 13, 2012 |

D. DEIS COMMENT & RESPONSE LETTERS

Table 28 below identifies comments received and corresponding response letters.

| <u>Table 28, DEIS Comment & Response Letters</u> | | |
|---|---|--------------------------------|
| <u>Date</u> | <u>Agency</u> | <u>Date of Response</u> |
| <u>July 5, 2012</u> | <u>Hawaiian Telcom</u> | <u>July 17, 2012</u> |
| <u>July 5, 2012</u> | <u>Department of Accounting and General Services</u> | <u>July 17, 2012</u> |
| <u>July 6, 2012</u> | <u>Department of the Interior, Geological Survey</u> | <u>July 17, 2012</u> |
| <u>July 6, 2012</u> | <u>County of Maui, Department of Fire and Public Safety, Fire Prevention Bureau</u> | <u>August 30, 2012</u> |
| <u>July 6, 2012</u> | <u>State of Hawaii, Department of Health, Environmental Health Branch</u> | <u>July, 17, 2012</u> |
| <u>July 11, 2012</u> | <u>Maui County, Department of Transportation</u> | <u>July 17, 2012</u> |
| <u>July 12, 2012</u> | <u>County of Maui, Department of Housing and Human Concerns</u> | <u>August 17, 2012</u> |
| <u>July 13, 2012</u> | <u>State of Hawaii, Department of Health, Wastewater Branch</u> | <u>August 17, 2012</u> |
| <u>July 16, 2012</u> | <u>State of Hawaii, Department of Health, Maui District Health Office</u> | <u>July 17, 2012</u> |
| <u>July 24, 2012</u> | <u>State of Hawaii, Department of Health, Safe Drinking Water Branch</u> | <u>September 10, 2012</u> |

Maui Research & Technology Park



| | | |
|---------------------------|--|---|
| <u>July 25, 2012</u> | <u>State of Hawaii, Department of Health, Solid and Hazardous Waste Branch</u> | <u>August 27, 2012 & March 1, 2013</u> |
| <u>July 25, 2012</u> | <u>County of Maui, Department of Parks & Recreation</u> | <u>August 17, 2012</u> |
| <u>July 26, 2012</u> | <u>County of Maui, Department of Public Works</u> | <u>October 12, 2012</u> |
| <u>July 30, 2012</u> | <u>State of Hawaii, DBEDT, Land Use Commission</u> | <u>January 30, 2013 & March 1, 2013</u> |
| <u>July 31, 2012</u> | <u>State of Hawaii, Department of Education</u> | <u>September 24, 2012 & March 1, 2013</u> |
| <u>August 3, 2012</u> | <u>Us. Fish and Wildlife Service Pacific Island Fish and Wildlife Office</u> | <u>October 12, 2012</u> |
| <u>August 5, 2012</u> | <u>Victoria Huffman, (Citizen comment)</u> | <u>March 1, 2013</u> |
| <u>August 7, 2012</u> | <u>Civil Defense</u> | <u>December 19, 2012 & March 1, 2013</u> |
| <u>August 8, 2012</u> | <u>Senator Rosalyn Baker</u> | <u>November 30, 2012 & March 1, 2013</u> |
| <u>August 8, 2012</u> | <u>State of Hawaii, DBEDT, Office of Planning</u> | <u>January 30, 2013 & March 1, 2013</u> |
| <u>August 13, 2012</u> | <u>Maui County, Department of Planning</u> | <u>November 26, 2012</u> |
| <u>August 13, 2012</u> | <u>State of Hawaii, Department of Land and Natural Resources, Engineering Division</u> | <u>August 27, 2012</u> |
| <u>August 13, 2012</u> | <u>State of Hawaii, Department of Land and Natural Resources, Land Division</u> | <u>August 27, 2012</u> |
| <u>August 13, 2012</u> | <u>State of Hawaii, Department of Land and Natural Resources, Division of Aquatic Resources</u> | <u>August 27, 2012</u> |
| <u>August 13, 2012</u> | <u>State of Hawaii, Department of Land and Natural Resources, Division of State Parks</u> | <u>August 27, 2012</u> |
| <u>August 15, 2012</u> | <u>County of Maui, Department of Water Supply</u> | <u>December 4, 2012 & March 1, 2013</u> |
| <u>August 16, 2012</u> | <u>State of Hawaii, Department of Health, Clean Air Branch</u> | <u>August 27, 2012</u> |
| <u>August 20, 2012</u> | <u>Maui County, Department of Planning, ZAED</u> | <u>December 4, 2012</u> |
| <u>August 27, 2012</u> | <u>State of Hawaii, Department of Land and Natural Resources, State Historic Preservation Division</u> | <u>December 19, 2012</u> |
| <u>August 31, 2012</u> | <u>University of Hawaii, Environmental Center</u> | <u>March 1, 2013</u> |
| <u>September 20, 2012</u> | <u>State of Hawaii, Department of Transportation</u> | <u>March 1, 2013</u> |
| | | |



TABLE 27
Early Consultation Comment & Response Letters

FAX TRANSMITTAL SHEET

ENVIRONMENTAL CENTER

University of Hawaii
2500 Dole Street, Krauss Annex 19, Honolulu, HI 96822
Telephone (808) 96-7361 Fax: (808) 956-3980

DATE: 9-10-10

FROM: Peter Rappa
Review Coordinator
Environmental Center

TO: Steve Perkins (808) 879-2557
Maui R&T Partners, Inc.
Kihei, Hawaii 96753

OEQC (808) 586-4186

Orlando Davidson (808) 587-3827
Land Use Commission
State of Hawaii

SUBJECT: EIS Preparation Notice
Maui Research and Technology Park Master Plan Update

No. of Pages including cover sheet: 3



UNIVERSITY
of HAWAII®
MĀNOA

September 10, 2010
RE: 0803

Maui R&T Partners, Inc.
1300 North Holopono, Suite 201
Kihei, HI 96753

c/o Steve Perkins
stevep@pacificrimland.com
FAX (808) 879-2557

Dear Mr. Perkins,

Environmental Impact Statement Preparation Notice
Maui Research & Technology Park Master Plan Update

The Maui Research & Technology Park proposes a Master Plan Update that would include (1) a 58 acre "Village Center" with a mix of housing, office, civic, live-work, park, and retail uses, (2) residential units on 100 acres, and (3) knowledge industry expansion on over 217 acres.

These comments were provided with the assistance of Philip Wirdzek, Affiliate/Sea Grant College Program and David Penn, Environmental Center.

General Comments

We noted some attention given to a new urbanism and smart growth, and chapters that address environment, land use, etc. However, we do not see a particularly strong emphasis on a sustainability plan or specific energy/environmental goals for the campus. There are a variety of efforts underway to provide guidance in achieving sustainable campuses. One is through the Labs21 program, specifically its annual conferences that provide a full track of presentations and discussions on R&D campus sustainability. Also, the National Renewable Energy Laboratory and Cornell have created a website, http://www.nrel.gov/applying_technologies/climate_neutral, which offers significant information on this topic; Cornell is leading this effort and is a Labs21 Center of Excellence for Sustainable R&D campuses.

September 10, 2010

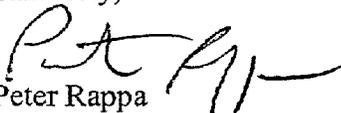
Page 2

Specific Comments

Philip Wirdzek, President and Executive Director of the International Institute for Sustainable Laboratories (I²SL), indicated that he would be glad to coordinate contacts for this project that may encourage a greater sensitivity to the objectives of sustainable R&D campuses. I²SL is dedicated to these goals and maintains a strong level of communication with industry, academic and government members that are committed to these objectives.

Thank you for the opportunity to comment on this notice of intent to prepare a Draft Environmental Impact Statement (EIS). When the Draft EIS is distributed for public review, please send two printed copies to the Environmental Center.

Sincerely,



Peter Rappa

Environmental Center Review Coordinator

cc: OEQC, State of Hawaii Office of Environmental Quality Control
Chittaranjan Ray, Interim Director, Water Resources Research Center, UH Manoa
Orlando Davidson, Executive Officer, State of Hawaii Land Use Commission
Michael Summers, Senior Associate, Chris Hart & Partners
Philip Wirdzek
David Penn



**CHRIS
HART**
& PARTNERS, INC.

Landscape Architecture
City & Regional Planning

November 29, 2011

Mr. Peter Rappa, Review Coordinator
Environmental Center
University of Hawaii
2500 Dole St., Krauss Annex 19
Honolulu, HI 96822

Dear Mr. Rappa,

RE: Early Consultation Letter for the Proposed Maui Research and Technology Park Master Plan update, located in Kihei, Maui, Hawaii at TMK's: (2) 2-2-024:1-9,14-17,31,34; (2) 2-2-002:054 (por.)

Thank you for your letter of September 10, 2010. The Applicant will address sustainability, energy conservation, and environment in the Draft EIS. As requested, we will send the Environmental Center two (2) printed copies.

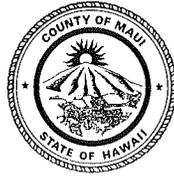
Thank you again and please feel free to call me or Mr. Brett Davis at (808) 242-1955 should you have any questions.

Sincerely yours,

Michael Summers
Senior Associate • Land Planner

CC. Mr. Steve Perkins, Pacific Rim Land, Inc.
Project File 08-132

CHARMAINE TAVARES
MAYOR



DON A. MEDEIROS
Director
WAYNE A. BOTEILHO
Deputy Director
Telephone (808) 270-7511
Facsimile (808) 270-7505

DEPARTMENT OF TRANSPORTATION

COUNTY OF MAUI
200 South High Street
Wailuku, Hawaii, USA 96793-2155

September 29, 2010

Mr. Michael J. Summers
Chris Hart & Partners Inc.
115 N Market Street
Wailuku, Maui, Hawaii 96793

Subject: Proposed Maui Research and Technology Park Master Plan

Dear Mr. Summers,

Thank you for the opportunity to comment on this project. We have no comments to make at this time.

Please feel free to contact me if you have any questions.

Sincerely,

A handwritten signature in cursive script, appearing to read "Don Medeiros".

Don Medeiros
Director

CC: Mike 08/13/2
RECEIVED

OCT - 8 2010

CHRIS HART & PARTNERS, INC.
Landscape Architecture and Planning



Landscape Architecture
City & Regional Planning

June 10, 2011

Ms. Jo Anne Johnson, Director
County of Maui Dept. of Transportation
2145 Kaohu St.
David Trask Bldg Ste 102
Wailuku, HI 96793

Dear Ms. Johnson,

RE: Early Consultation Letter for the Proposed Maui Research and Technology
Park Master Plan update, located in Kihei, Maui, Hawaii at TMK's: (2) 2-2-024:1-
9,14-17,31,34; (2) 2-2-002:054 (por.)

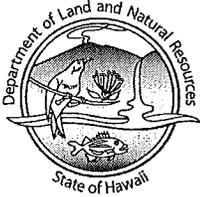
Thank you for your Department's letter of September 29, 2010 that states your
department has no comment on this project at this time.

Thank you again for providing us with your response. Please feel free to call me or Mr.
Brett Davis at (808) 242-1955 should you have any questions.

Sincerely yours,

Michael Summers
Senior Associate • Land Planner

CC. Mr. Steve Perkins, Pacific Rim Land, Inc.
Project File 08-132



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

September 30, 2010

MEMORANDUM

TO: **DLNR Agencies:**
 Div. of Aquatic Resources
 Div. of Boating & Ocean Recreation
 Engineering Division
 Div. of Forestry & Wildlife
 Div. of State Parks
 Commission on Water Resource Management
 Office of Conservation & Coastal Lands
 Land Division -Maui District

RECEIVED
LAND DIVISION
2010 OCT 13 P 3:02
DEPT. OF LAND &
NATURAL RESOURCES
STATE OF HAWAII

FROM: Charlene Unoki, Assistant Administrator *Charlene*
SUBJECT: Early Consultation for the Proposed Maui Research and Technology Park Master Plan Update
LOCATION: Island of Maui
APPLICANT: Chris Hart & Partners on behalf of Maui Research Partners, LLC

Transmitted for your review and comment on the above referenced document. We would appreciate your comments on this document. Please submit any comments by October 18, 2010.

If no response is received by this date, we will assume your agency has no comments. If you have any questions about this request, please contact my office at 587-0433. Thank you.

Attachments

- We have no objections.
- We have no comments.
- Comments are attached.

Signed: *[Signature]*
Date: _____



Landscape Architecture
City & Regional Planning

June 12, 2011

Department of Land and Natural Resources
Division of Forestry and Wildlife
P.O. Box 621
Honolulu, HI 96809

To Whom It May Concern:

RE: Early Consultation Letter for the Proposed Maui Research and Technology Park Master Plan update, located in Kihei, Maui, Hawaii at TMK's: (2) 2-2-024:1-9,14-17,31,34; (2) 2-2-002:054 (por.)

Thank you for your letter of September 30, 2010 indicating that the Division of Forestry & Wildlife has no comments.

Thank you again for letter. Please feel free to call me or Mr. Brett Davis at (808) 242-1955 should you have any questions.

Sincerely yours,

Michael Summers
Senior Associate • Land Planner

CC. Mr. Steve Perkins, Pacific Rim Land, Inc.
Project File 08-132



REPLY TO
ATTENTION OF:

DEPARTMENT OF THE ARMY
U.S. ARMY ENGINEER DISTRICT, HONOLULU
FORT SHAFTER, HAWAII 96858-5440

October 1, 2010

RECEIVED

OCT - 4 2010

CHRIS HART & PARTNERS, INC.
Landscape Architecture and Planning

Cc: Mike

08/132

Regulatory Branch

File Number POH-2010-00276

Chris Hart & Partners, Inc.
Attention: Michael Summers
115 North Market Street
Wailuku, Hawaii 96793

Dear Mr. Summers:

We have received your early consultation letter dated September 24, 2010 requesting U.S. Army Corps of Engineers (Corps) comment on the Environmental Impact Statement (EIS) Preparation Notice for the Proposed Maui Research and Technology Park Master Plan located in Kihei, Island of Maui, Hawaii. We have assigned the project the reference number **POH-2010-00276**. Please cite the reference number in any future correspondence concerning this project. We completed our review of the submitted document pursuant to Section 10 of the Rivers and Harbors Act of 1899 (Section 10) and Section 404 of the Clean Water Act (Section 404).

Section 10 requires that a Department of the Army (DA) permit be obtained from the Corps prior to undertaking any construction, dredging and other activities occurring in, over, or under navigable waters of the U.S. The line of jurisdiction extends to the Mean High Water (MHW) Mark for tidal waters. Section 404 requires that a DA permit be obtained for the discharge (placement) of dredge and/or fill material into waters of the U.S., including wetlands. The line of jurisdiction extends to the Mean Higher High Water (MHHW) Mark for tidally influenced waters, the Ordinary High Water (OHW) Mark for non-tidal waters and the approved delineated boundary for wetlands.

The submitted documents do not provide sufficient information to determine whether or not the Waipuilani or Keokea Gulches are waters of the United States, subject to Corps jurisdiction, nor do they state whether the review area consists of any additional unidentified waters of the U.S. and adjacent wetlands, or whether these water bodies are proposed for impact. When developing the EIS, we recommend you conduct a thorough aquatic resource survey, describing any wetlands, drainage ditches, gulches, gullies, streams, etc., on-site, especially those that may be impacted by any of the proposed project components. In addition, include sufficient information concerning the scope of work, including the use of Best Management Practices, i.e. silt fences and sandbag berms within the vicinity and in close proximity to potentially regulated bodies of water. The Corps of Engineers has sole authority to determine if an aquatic feature is or is not a water of the U.S., potentially subject to regulation under Section 10 and/or Section 404. We encourage the applicant to contact the Corps requesting a formal jurisdictional determination during development of future plans involving work in close proximity to an aquatic feature and/or its associated tributaries and wetlands. If any water bodies are determined

to be waters of the U.S., the applicant must obtain authorization from the Corps prior to work in or discharge of dredged or fill material into such water bodies.

Thank you for contacting us regarding this project and providing us with the opportunity to comment. Should you have any questions, please contact Ms. Jessie Pa'ahana at *808.438.0391* or via e-mail at *Jessie.K.Paahana@usace.army.mil*. Please be advised you can provide comments on your experience with the Honolulu District Regulatory Branch by accessing our web-based customer survey form at *http://per2.nwp.usace.army.mil/survey.html*.

Sincerely,

A handwritten signature in black ink, appearing to read "George P. Young". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

George P. Young, P.E.
Chief, Regulatory Branch



Landscape Architecture
City & Regional Planning
October 25, 2011

Mr. George P. Young, P.E.
Chief, Regulatory Branch
U.S. Army Engineer District, Honolulu
Fort Shafter, HI 96858-5440

Dear Mr. Young,

RE: Early Consultation Letter for the Proposed Maui Research and Technology Park
Master Plan update, located in Kihei, Maui, Hawaii at TMK's: (2) 2-2-024:1-9,14-
17,31,34; (2) 2-2-002:054 (por.) **POH 2010-002676**

Thank you for your letter of October 1, 2010. On behalf of the Applicant the State Land Use Commission will send your Branch a copy of the Draft Environmental Impact Statement (EIS), for further review. The Applicant will identify aquatic resources, if applicable and coordinate with your Branch in requesting a formal jurisdictional determination during the development of future plans involving work in close proximity to an aquatic feature and/or its associated tributaries and wetlands.

Thank you again for providing us with your response and we look forward to your review of the draft EIS document. Please feel free to call me or Mr. Brett Davis of our office at (808) 242-1955 should you have any questions.

Sincerely yours,

Michael Summers
Senior Associate • Land Planner

CC. Mr. Steve Perkins, Pacific Rim Land, Inc.
Project File 08-132

CHARMAINE TAVARES
Mayor
KATHLEEN ROSS AOKI
Director
ANN T. CUA
Deputy Director



RECEIVED

OCT - 7 2010

CHRIS HART & PARTNERS, INC.
Landscape Architects and Planners

CC: Mike 08/132

COUNTY OF MAUI
DEPARTMENT OF PLANNING

October 4, 2010

Mr. Michael Summers
Chris Hart & Partners, Inc.
115 North Market Street
Wailuku, Hawaii 96793-1717

Dear Mr. Summers:

SUBJECT: ENVIRONMENTAL ASSESSMENT (EA) / ENVIRONMENTAL IMPACT STATEMENT (EIS) PREPARATION NOTICE FOR THE UPDATE TO THE MASTER PLAN FOR THE MAUI RESEARCH AND TECHNOLOGY PARK (MRTP) AND PROPOSED DISTRICT BOUNDARY AMENDMENT (DBA) FOR THE MRTP MASTER PLAN LOCATED AT KIHEI, MAUI, HAWAII; TMK(S): (2) 2-2-024:001-009, 014-017, 031, 034 AND (2) 2-2-002:054 (POR.) (RFC 2010/0089)

The Department of Planning (Department) is in receipt of the above-referenced document for the proposed update to the Master Plan for the MRTP and petition to amend the land use boundary to effect a district reclassification of approximately 253.05 acres of land situated at Kihei, Maui, Hawaii, from the Agricultural District to the Urban District for the MRTP. The Department understands the proposed action includes the following:

- The Applicant is Maui R&T Partners, LLC;
- The Applicant is requesting a Land Use DBA for a reclassification of approximately 253.05 acres of land from the Agricultural District to the Urban District located at TMK(S): (2) 2-2-024:016, 017 and a portion of (2) 2-2-002:054;
- The Accepting Authority is the Land Use Commission of the State of Hawaii;
- The proposed project will require an amendment to the Kihei-Makena Community Plan (CPA) from Project District and Public-Quasi Public to a district that better aligns with the MRTP Master Plan strategic vision and changes of Maui County Code (MCC) Title 19.33 "Kihei Research & Technology Park District;"
- The proposed project will require a Maui County Change in Zoning (CIZ) in order to bring the entire Park site into the Research and Technology Park District, whereas portions of the Park are currently zoned Agricultural; and
- The CPA and anticipated "off-site" infrastructure work affecting State and County "rights-of-way" are "triggers" for the preparation of an EIS.

Based on the foregoing, the Department provides the following comments in preparation of the Draft EIS:

1. The petition to amend the land use district boundary of certain lands consisting of 253.05 acres from the Agricultural District to the Urban District is related to Tax Map Key Nos. (2) 2-2-024:016, and 017, and (2) 2-2-002:054 (por.);
2. The Department concurs that the proposed CPA and anticipated use of State and County lands are "triggers" that require compliance with Chapter 343, Hawaii Revised statutes (HRS);
3. The Department believes that the State Land Use Commission shall be the accepting authority for the EIS pursuant to Chapter 343, HRS;
4. On June 23, 2010, the Applicant filed a petition with the State Land Use Commission for a DBA from Agriculture to Urban for certain lands as identified;
5. The Applicant will be filing CPA and CIZ applications for the project;
6. The Draft EIS that looks at the MRTP Master Plan Update as a whole shall include Transportation Demand Management Measures along with a Traffic Impact and Analysis Report (TIAR) for the project which shall seek to reduce or mitigate traffic impacts;
7. The Draft EIS that looks at the MRTP Master Plan Update as a whole shall fully state how the project will provide affordable housing in accordance with the County's Workforce Housing Policy as applicable and that the Applicant will coordinate with the Department of Housing and Human Concerns an appropriate affordable housing program;
8. The Department recommends that this project as a whole be reviewed by the Maui County Urban Design Review Board (UDRB) to allow for a discussion of project design as it will include residential, civic, and commercial mixed-use components, along with areas of open space and parks;
9. The Department understands that the Petition for a DBA is one part of the MRTP Master Plan Update and that the Department will be granted the opportunity to comment upon the Draft EIS that fully outlines the proposed updated Master Plan and its associated impacts at a future date; and
10. The County of Maui is currently reviewing the Draft Maui Island Plan that proposes a Directed Growth Strategy to establish urban growth boundaries and understands the land area under review for this Petition for a DBA from the Agricultural District to the Urban District is within the proposed urban growth boundaries of the Draft Maui Island Plan. Please include an overlay of the proposed urban growth boundary of the Draft Maui Island Plan or the Maui Island Plan (if available) on a map of the proposed DBA for the project.

Mr. Michael Summers
October 4, 2010
Page 3

Thank you for the opportunity to comment. Please include the Department on the distribution list of the Draft EIS. Should you require further clarification, please contact Staff Planner Kurt Wollenhaupt at kurt.wollenhaupt@mauicounty.gov or at (808) 270-1789.

Sincerely,



KATHLEEN ROSS AOKI
Planning Director

xc: Clayton I. Yoshida, AICP, Planning Program Administrator
Aaron H. Shinmoto, PE, Planning Program Administrator (2)
John F. Summers, Planning Program Administrator
Kurt F. Wollenhaupt, Staff Planner
Orlando Davidson, Executive Director, State of Hawaii Land Use Commission
Maui R&T Partners, LLC
B. Martin Luna, Esq, Carlsmith Ball LLC
Project File
General File

KRA:KFW:sa

K:\WP_DOCS\PLANNING\RFC\2010\0089_Maui Research & Tech Park\Comment on EIS October 2010.DOC



**CHRIS
HART**
& PARTNERS, INC.

Landscape Architecture
City & Regional Planning

November 29, 2011

Mr. William Spence, Director
Department of Planning
250 S. High Street
Wailuku, HI 96793

Dear Mr. Spence,

RE: Early Consultation Letter for the Proposed Maui Research and Technology Park Master Plan update, located in Kihei, Maui, Hawaii at TMK's: (2) 2-2-024:1-9,14-17,31,34; (2) 2-2-002:054 (por.)

Thank you for your letter of October 4, 2010. The following responses are provided for your numerated comments.

1. The Applicant acknowledges that this information is correct.
2. The Applicant acknowledges that this information is correct.
3. The Applicant is aware that the State Land Use Commission will be the accepting authority for the EIS pursuant to Chapter 343, HRS.
4. The Applicant acknowledges that this information is correct.
5. On behalf of the Applicant, CH&P is preparing CPA and CIZ applications which will be submitted concurrently with the Draft Environmental Impact Statement.

6. The Draft EIS will include a traffic analysis that will include Transportation Demand Management Measures along with a Traffic Impact and Analysis Report.

7. The Draft EIS will provide information on how the project will provide affordable housing in compliance with the County's Workforce Housing Policy. The Applicant will coordinate with the Department of Housing and Human Concerns on an appropriate affordable housing program.

8. The proposed project was reviewed by the Maui County Urban Design Review Board (UDRB) on November 16, 2010 to allow the project team to introduce the project design to the UDRB. No formal recommendation was made at the meeting and the project will be presented again before the board at a later date, as the plan is refined.

9. The Draft EIS will outline the updated Master Plan and its associated impacts and mitigation measures.

10. The Draft EIS application will include an overlay of the proposed urban growth boundary of the Draft Maui Island Plan or the Maui Island Plan (if available) on a map of the proposed DBA for the project.

Thank you and we look forward to your review of the project in the future. Please feel free to call me or Mr. Brett Davis of our office at (808) 242-1955 should you have any questions.

Sincerely yours,



Michael Summers
Senior Associate • Land Planner



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

September 30, 2010

MEMORANDUM

TO: **DLNR Agencies:**
 Div. of Aquatic Resources
 Div. of Boating & Ocean Recreation
 Engineering Division
 Div. of Forestry & Wildlife
 Div. of State Parks
 Commission on Water Resource Management
 Office of Conservation & Coastal Lands
 Land Division - Maui District

DEPT. OF LAND &
NATURAL RESOURCES
STATE OF HAWAII

RECEIVED
COMMISSIONER
RESOURCES
LAND DIVISION
2010 OCT -5 AM 9:58
2010 OCT -5 PM 3:10

FR:
TO:

FROM: Charlene Unoki, Assistant Administrator *Charlene*
 SUBJECT: Early Consultation for the Proposed Maui Research and Technology Park Master Plan Update
 LOCATION: Island of Maui
 APPLICANT: Chris Hart & Partners on behalf of Maui Research Partners, LLC

Transmitted for your review and comment on the above referenced document. We would appreciate your comments on this document. Please submit any comments by October 18, 2010.

If no response is received by this date, we will assume your agency has no comments. If you have any questions about this request, please contact my office at 587-0433. Thank you.

Attachments

- () We have no objections.
- () We have no comments.
- (✓) Comments are attached.

Signed: *Rechny*
Date: 10/5/10

No mention of the two gulches adjacent to site.

| | |
|----------|-------------------|
| FILE ID: | <u>RFP 2790.6</u> |
| DOC ID: | <u>6986</u> |

6971 ✓



Landscape Architecture
City & Regional Planning

June 12, 2011

Department of Land and Natural Resources
Commission on Water Resource Management
P.O. Box 621
Honolulu, HI 96804

To Whom It May Concern:

RE: Early Consultation Letter for the Proposed Maui Research and Technology
Park Master Plan update, located in Kihei, Maui, Hawaii at TMK's: (2) 2-2-024:1-
9,14-17,31,34; (2) 2-2-002:054 (por.)

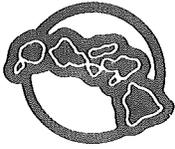
Thank you for your letter of October 5, 2010. The Applicant will include an
analysis of the adjacent gulches in the forthcoming draft Environmental Impact
Statement document.

Thank you again for providing us with your response. Please feel free to call me
or Mr. Brett Davis at (808) 242-1955 should you have any questions.

Sincerely yours,

Michael Summers
Senior Associate • Land Planner

CC. Mr. Steve Perkins, Pacific Rim Land, Inc.
Project File 08-132



RECEIVED

OCT - 6 2010

CHRIS HART & PARTNERS, INC.
Landscape Architecture and Planning

CL MICK

08/132

October 5, 2010

Mr. Michael Summers, Senior Associate
Chris Hart & Partners, Inc.
115 North Market Street
Wailuku, Hawaii, 96793

Subject: Environmental Assessment/Environmental Impact Statement Preparation Notice
Maui Research & Technology Park Master Plan Update
Tax Map Keys: (2) 2-2-024:001 to 009, 014 to 017, 031, and 034,
(2) 2-2002:054 (por.)
Piilani Highway and Lipoa Parkway
Kihei, Maui, Hawaii

Dear Mr. Summers,

Thank you for allowing us to comment on the Environmental Assessment/Environmental Impact Statement Preparation Notice for the subject project.

In reviewing our records and the information received, Maui Electric Company has overhead facilities within the project site. We encourage the customer to submit survey and civil plans to us as soon as practical to verify the project's location requirements and address any possible relocations or conversions of our facilities.

Should you have any questions or concerns, please call me at 871-2341.

Sincerely,

A handwritten signature in black ink, appearing to read 'Kyle Tamori', followed by a long horizontal line extending to the right.

Kyle Tamori
Staff Engineer



Landscape Architecture
City & Regional Planning

June 10, 2011

Mr. Kyle Tamori, Staff Engineer
Maui Electric Company, Ltd.
210 West Kamehameha Ave.
P.O. Box 398 Kahului, HI 96733

Dear Mr. Tamori,

RE: Early Consultation Letter for the Proposed Maui Research and Technology Park
Master Plan update, located in Kihei, Maui, Hawaii at TMK's: (2) 2-2-024:1-9,14-
17,31,34; (2) 2-2-002:054 (por.)

Thank you for your letter of October 5, 2010 indicating that Maui Electric
Company (MECO) has overhead facilities within the project site. The customer
will coordinate with MECO as soon as practical to verify the project location
requirements.

Thank you again for providing us with your response. Please feel free to call me
or Mr. Brett Davis at (808) 242-1955 should you have any questions.

Sincerely yours,

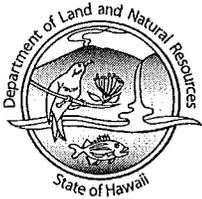
Michael Summers
Senior Associate • Land Planner

CC. Mr. Steve Perkins, Pacific Rim Land, Inc.
Project File 08-132

LINDA LINGLE
GOVERNOR OF HAWAII



54340
LAURA H. THIELEN
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

September 30, 2010

DEPT. OF LAND &
NATURAL RESOURCES
STATE OF HAWAII

2010 OCT 13 P 3:06

RECEIVED
LAND DIVISION

MEMORANDUM

TO: **DLNR Agencies:**
 Div. of Aquatic Resources
 Div. of Boating & Ocean Recreation
 Engineering Division
 Div. of Forestry & Wildlife
 Div. of State Parks
 Commission on Water Resource Management
 Office of Conservation & Coastal Lands
 Land Division –Maui District

DEPT OF LAND &
NATURAL RESOURCES

10 OCT -5 AIO:48

RECEIVED
STATE PARKS DIV.

FROM: Charlene Unoki, Assistant Administrator *Charlene*
SUBJECT: Early Consultation for the Proposed Maui Research and Technology Park Master Plan Update
LOCATION: Island of Maui
APPLICANT: Chris Hart & Partners on behalf of Maui Research Partners, LLC

2-2-24: 1-2, 14-17, 31, 34; 2-2-02: 54 (p.m.)

Transmitted for your review and comment on the above referenced document. We would appreciate your comments on this document. Please submit any comments by October 18, 2010.

If no response is received by this date, we will assume your agency has no comments. If you have any questions about this request, please contact my office at 587-0433. Thank you.

Attachments

- () We have no objections.
- (✓) We have no comments.
- () Comments are attached.

Signed: *Charlene Unoki*
Date: 10/12/10



Landscape Architecture
City & Regional Planning

June 10, 2011

Department of Land and Natural Resources
Division of State Parks
P.O. Box 621
Honolulu, HI 96804

To Whom It May Concern:

RE: Early Consultation Letter for the Proposed Maui Research and Technology
Park Master Plan update, located in Kihei, Maui, Hawaii at TMK's: (2) 2-2-024:1-
9,14-17,31,34; (2) 2-2-002:054 (por.)

Thank you for your letter of October 12, 2010 indicating that the Division of State
Parks has no comment.

Thank you again for letter. Please feel free to call me or Mr. Brett Davis at (808)
242-1955 should you have any questions.

Sincerely yours,

Michael Summers
Senior Associate • Land Planner

CC. Mr. Steve Perkins, Pacific Rim Land, Inc.
Project File 08-132



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

September 30, 2010

RECEIVED
LAND DIVISION
2010 OCT 13 P 2:44
DEPT OF LAND &
NATURAL RESOURCES
STATE OF HAWAII

10 OCT 05 PM 02:01 ENGINEERING

MEMORANDUM

- TO: **DLNR Agencies:**
- Div. of Aquatic Resources
 - Div. of Boating & Ocean Recreation
 - Engineering Division
 - Div. of Forestry & Wildlife
 - Div. of State Parks
 - Commission on Water Resource Management
 - Office of Conservation & Coastal Lands
 - Land Division –Maui District

FROM: Charlene Unoki, Assistant Administrator *Charlene*

SUBJECT: Early Consultation for the Proposed Maui Research and Technology Park Master Plan Update

LOCATION: Island of Maui

APPLICANT: Chris Hart & Partners on behalf of Maui Research Partners, LLC

Transmitted for your review and comment on the above referenced document. We would appreciate your comments on this document. Please submit any comments by October 18, 2010.

If no response is received by this date, we will assume your agency has no comments. If you have any questions about this request, please contact my office at 587-0433. Thank you.

Attachments

- We have no objections.
- We have no comments.
- Comments are attached.

Signed: *[Signature]*

Date: 10/12/10

**DEPARTMENT OF LAND AND NATURAL RESOURCES
ENGINEERING DIVISION**

LM/CharleneUnoki
REF.: EarlyConsuotMauiResearchTechParkMasterPlanUpdate
Maui.519

COMMENTS

- (X) **We confirm that the project site, according to the Flood Insurance Rate Map (FIRM), is located in Zone X. The Flood Insurance Program does not have any regulations for developments within Zone X.**
- () Please take note that the project site, according to the Flood Insurance Rate Map (FIRM), is located in Zone ____.
- () Please note that the correct Flood Zone Designation for the project site according to the Flood Insurance Rate Map (FIRM) is ____.
- () Please note that the project must comply with the rules and regulations of the National Flood Insurance Program (NFIP) presented in Title 44 of the Code of Federal Regulations (44CFR), whenever development within a Special Flood Hazard Area is undertaken. If there are any questions, please contact the State NFIP Coordinator, Ms. Carol Tyau-Beam, of the Department of Land and Natural Resources, Engineering Division at (808) 587-0267.

Please be advised that 44CFR indicates the minimum standards set forth by the NFIP. Your Community's local flood ordinance may prove to be more restrictive and thus take precedence over the minimum NFIP standards. If there are questions regarding the local flood ordinances, please contact the applicable County NFIP Coordinators below:

- () Mr. Robert Sumitomo at (808) 768-8097 or Mr. Mario Siu Li at (808) 768-8098 of the City and County of Honolulu, Department of Planning and Permitting..
- () Mr. Carter Romero at (808) 961-8943 of the County of Hawaii, Department of Public Works.
- () Mr. Francis Cerizo at (808) 270-7771 of the County of Maui, Department of Planning.
- () Ms. Wynne Ushigome at (808) 241-4890 of the County of Kauai, Department of Public Works.

- () The applicant should include water demands and infrastructure required to meet project needs. Please note that projects within State lands requiring water service from the Honolulu Board of Water Supply system will be required to pay a resource development charge, in addition to Water Facilities Charges for transmission and daily storage.
- () The applicant should provide the water demands and calculations to the Engineering Division so it can be included in the State Water Projects Plan Update

- () Additional Comments: _____

- () Other: _____

Should you have any questions, please call Ms. Suzie S. Agraan of the Planning Branch at 587-0258.

Signed: 
CARY S. CHANG, CHIEF ENGINEER
Date: 10/12/10



Landscape Architecture
City & Regional Planning

June 10, 2011

Mr. Carty S. Chang, Chief Engineer
Department of Land and Natural Resources
Engineering Division
P.O. Box 621
Honolulu, HI 96809

Dear Mr. Chang,

RE: Early Consultation Letter for the Proposed Maui Research and Technology
Park Master Plan update, located in Kihei, Maui, Hawaii at TMK's: (2) 2-2-024:1-
9,14-17,31,34; (2) 2-2-002:054 (por.)

Thank you for your letter of October 12, 2010 indicating that your Division
confirms that the project site, according to the Flood Insurance Rate Map (FIRM)
is located in Zone X.

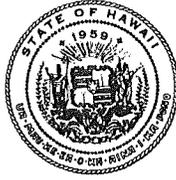
Thank you again for letter. Please feel free to call me or Mr. Brett Davis at (808)
242-1955 should you have any questions.

Sincerely yours,

Michael Summers
Senior Associate • Land Planner

CC. Mr. Steve Perkins, Pacific Rim Land, Inc.
Project File 08-132

LINDA LINGLE
GOVERNOR OF HAWAII



STATE OF HAWAII
DEPARTMENT OF HEALTH
MAUI DISTRICT HEALTH OFFICE
54 HIGH STREET
WAILUKU, MAUI, HAWAII 96793-2102

CHIYOME L. FUKINO, M. D.
DIRECTOR OF HEALTH

LORRIN W. PANG, M. D., M. P. H.
DISTRICT HEALTH OFFICER

RECEIVED

OCT 13 2010

CHRIS HART & PARTNERS, INC.
Landscape Architecture and Planning

October 12, 2010

CC: MIKE

08/132

Mr. Michael Summers
Senior Associate
Chris Hart & Partners, Inc.
115 North Market Street
Wailuku, Hawai'i 96793

Dear Mr. Summers:

Subject: Early Consultation Letter for the Proposed Maui Research and Technology Park Master Plan update, Kihei, Maui, Hawaii
TMK: (2) 2-2-024:1-9, 14-17, 31, 34; (2) 2-2-002:054 (por.)

Thank you for the opportunity to comment on this project. We have the following comments:

1. National Pollutant Discharge Elimination System (NPDES) permit coverage maybe required for this project. The Clean Water Branch should be contacted at 808 586-4309.
2. The noise created during the construction phase of the project may exceed the maximum allowable levels as set forth in Hawaii Administrative Rules (HAR), Chapter 11-46, "Community Noise Control." A noise permit may be required and should be obtained before the commencement of work.

It is strongly recommended that the Standard Comments found at the Department's website: <http://hawaii.gov/health/environmental/env-planning/landuse/landuse.html> be reviewed, and any comments specifically applicable to this project should be adhered to.

Should you have any questions, please call me at 808 984-8230 or E-mail me at patricia.kitkowski@doh.hawaii.gov.

Sincerely,

Patti Kitkowski

Acting District Environmental Health Program Chief

c EPO



Landscape Architecture
City & Regional Planning

June 12, 2011

Ms. Patti Kitkowski
Acting District Environmental Health Program Chief
Dept. of Health
Maui District Health Office
54. High St.
Wailuku, HI 96793-2102

Dear Ms. Kitkowski,

RE: Early Consultation Letter for the Proposed Maui Research and Technology Park Master Plan update, located in Kihei, Maui, Hawaii at TMK's: (2) 2-2-024:1-9,14-17,31,34; (2) 2-2-002:054 (por.)

Thank you for your letter of October 12, 2010. The Applicant will coordinate with the Department of Health, Clean Water Branch to determine if a NPDES permit is required for the proposed expansion of the Maui Research and Technology Park. The construction phase of the project will comply with allowable noise levels as set forth in Hawaii Administrative Rules (HAR), Chapter 11-46, "Community Noise Control." The Applicant has reviewed the Standard Comments and will comply, as applicable with the proposed project.

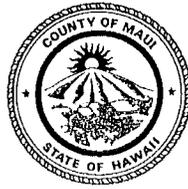
Thank you again for providing us with your response. Please feel free to call me or Mr. Brett Davis of our office at (808) 242-1955 should you have any questions.

Sincerely yours,

Michael Summers
Senior Associate • Land Planner

CC. Mr. Steve Perkins, Pacific Rim Land, Inc.
Project File 08-132

CHARMAINE TAVARES
Mayor



TAMARA HORCAJO
Director

ZACHARY Z. HELM
Deputy Director

(808) 270-7230
Fax (808) 270-7934

DEPARTMENT OF PARKS & RECREATION

700 Hali'a Nakoa Street, Unit 2, Wailuku, Hawaii 96793

October 12, 2010

Attention: Michael J. Summers, Senior Associate
Chris Hart & Partners, Inc.
115 N. Market Street
Wailuku, Hawaii 96793

SUBJECT: Early Consultation Letter for the Proposed Maui Research and Technology Park Master Plan update, located in Kihei, Maui, Hawaii at TMK's: (2) 2-2-024:1-9, 14-17, 31, 34; (2) 2-2-002:054 (por.)

Dear Mr. Summers:

Based on our review of the proposed Maui Research and Technology Park Master Plan update, the Parks Department does not have any comments at this time. Be advised that the residential components of this development will be subject to park assessment requirements. Please provide us with detailed plans for the residential components as soon as they become available.

Thank you for the opportunity to review and comment on this matter. Please feel free to contact me or Mr. Baron Sumida, CIP Coordinator in the Parks Planning and Development Division at 270-6173 should you have any questions.

Sincerely,

A handwritten signature in cursive script, appearing to read "Tamara Horcajo".

TAMARA HORCAJO
Director

c: Patrick Matsui, Chief of Parks Planning & Development
TH:PTM:bks

RECEIVED

OCT 19 2010

CHRIS HART & PARTNERS, INC.
Landscape Architecture and Planning

cc. Mike

08/132



Landscape Architecture
City & Regional Planning

June 10, 2011

Mr. Glenn Correra, Director
Department of Parks and Recreation
700 Hali'a Nakoa St. Unit 2
Wailuku, HI 96793

Dear Mr. Correra,

RE: Early Consultation Letter for the Proposed Maui Research and Technology
Park Master Plan update, located in Kihei, Maui, Hawaii at TMK's: (2) 2-2-024:1-
9,14-17,31,34; (2) 2-2-002:054 (por.)

This is in response to your Departments letter dated October 12, 2010 stating that
the department has no comment at this time. The Applicant acknowledges that
the residential components of this development will be subject to park
assessment requirements. The Applicant will provide your department with the
detailed plans when available.

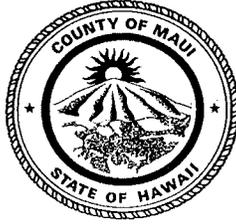
Thank you and we look forward to your review of the project in the future.
Please feel free to call me or Mr. Brett Davis at (808) 242-1955 should you have
any questions.

Sincerely yours,

Michael Summers
Senior Associate • Land Planner

CC. Mr. Steve Perkins, Pacific Rim Land, Inc.
Project File 08-132

CHARMAINE TAVARES
Mayor
CHERYL K. OKUMA, Esq.
Director
GREGG KRESGE
Deputy Director



TRACY TAKAMINE, P.E.
Solid Waste Division
DAVID TAYLOR, P.E.
Wastewater Reclamation
Division

**COUNTY OF MAUI
DEPARTMENT OF
ENVIRONMENTAL MANAGEMENT**
2200 MAIN STREET, SUITE 100
WAILUKU, MAUI, HAWAII 96793

October 15, 2010

RECEIVED

OCT 19 2010

CHRIS HART & PARTNERS, INC.
Landscape Architecture and Planning

*CU. MIKE
08/11/32*

Mr. Michael Summers
Chris Hart & Partners
115 N. Market Street
Wailuku, Hawaii 96793

Dear Mr. Summers:

**SUBJECT: MAUI RESEARCH AND TECHNOLOGY PARK
MASTER PLAN UPDATE
EA/EIS PREPARATION NOTICE
TMK (2) 2-2-024:001-009, 014-017, 031, 034; 2-2-002:054 (POR.), KIHEI**

We reviewed the subject application and have the following comments:

1. Solid Waste Division comments:
 - a. None.
2. Wastewater Reclamation Division (WWRD) comments:
 - a. Although wastewater system capacity is currently available as of 10/15/2010, the developer should be informed that wastewater system capacity cannot be ensured until the issuance of the building permit.
 - b. Wastewater contribution calculations are required before building permit is issued.
 - c. Developer shall pay assessment fees for treatment plant expansion costs in accordance with ordinance setting forth such fees. The property is located in the Kihei Assessment Area - Facility Fee only.
 - d. Developer is required to fund any necessary off-site improvements to collection system and wastewater pump stations.
 - e. Show or list minimum slope of new sewer laterals.
 - f. The proposed sewer improvements for the subject project shall remain privately owned and maintained.

- g. If any proposed sewer improvements for the subject project involves connection to an existing private sewer system, then the developer will need to provide written permission from the owner of the said private system to connect to the existing private sewer system, and confirmation that the existing private sewer system is adequate to accept the additional wastewater discharge proposed by the subject project.
- h. Indicate on the plans the ownership of each easement (in favor of which party). Note: County will not accept sewer easements that traverse private property.
- i. Kitchen facilities within the proposed project shall comply with pre-treatment requirements (including grease interceptors, sample boxes, screens etc.)
- j. Non-contact cooling water and condensate should not drain to the wastewater system.

If you have any questions regarding this memorandum, please contact Gregg Kresge at 270-8230.

Sincerely,



CHERYL K. OKUMA
Director of Environmental Management



Landscape Architecture
City & Regional Planning
June 12, 2011

Mr. Kyle Ginoza, Director
Dept. of Environmental Management
2200 Main Street, Suite 100
Wailuku, HI 96793

Dear Mr. Ginoza,

RE: Early Consultation Letter for the Proposed Maui Research and Technology Park Master Plan update, located in Kihei, Maui, Hawaii at TMK's: (2) 2-2-024:1-9,14-17,31,34; (2) 2-2-002:054 (por.)

Thank you for your Departments letter of October 15, 2010. Below are responses to the department's comments:

- a. The Applicant is aware that wastewater system capacity cannot be ensured until the issuance of a building permit.
- b. The Applicant will provide wastewater calculations before applying for a building permit.
- c. The Developer will pay assessment fees for treatment plant expansion costs in accordance with ordinance setting forth such fees.
- d. The Applicant is aware that they are required to fund any necessary off-site improvements to collection system and wastewater pump stations.
- e. The Applicant will provide plans that show or list minimum slope of new sewer laterals.
- f. Sewer improvements will remain privately owned and maintained.
- g. The proposed sewer improvements for the subject project will not involve connecting to an existing private sewer system.
- h. The Applicant will provide plans that indicate the ownership of each easement in favor of which party.

Mr. Kyle Ginoza, Director
Maui R&T Park
Response Letter
June 12, 2011
Page 2 of 2

- i. Kitchen facilities with the project will comply with pre-treatment requirements.
- j. The Applicant is aware that non-contact cooling water and condensate should not drain to the wastewater system.

Thank you again for providing us with your comments. Please feel free to call me or Mr. Brett Davis of our office at (808) 242-1955 should you have any questions.

Sincerely yours,

A handwritten signature in black ink that reads "Michael J. Summers". The signature is written in a cursive, flowing style.

Michael Summers
Senior Associate • Land Planner

CC. Mr. Steve Perkins, Pacific Rim Land, Inc.
Project File 08-132



STATE OF HAWAII
DEPARTMENT OF EDUCATION
P.O. BOX 2360
HONOLULU, HAWAII 96804

RECEIVED

OCT 19 2010

CHRIS HART & PARTNERS, INC.
Landscape Architecture and Planning

cc. Mike 081132

OFFICE OF THE SUPERINTENDENT

October 15, 2010

Mr. Michael Summers, Senior Associate
Chris Hart & Partners, Inc.
115 North Market Street
Wailuku, Hawaii 96793

Dear Mr. Summers:

Subject: Early Consultation Request for the Proposed Maui Research
and Technology Park Master Plan Update,
TMKs (2) 2-2-024:1-9, 14-17, 31, 34 and (2) 2-2-002:054 (por.)
Kihei, Maui, Hawai'i

The Department of Education (DOE) has reviewed the early consultation request for the proposed Maui Research and Technology Park Master Plan Update.

The DOE is proposing a school impact fee district in Central Maui, which includes Kihei. If the Board of Education adopts the impact district, this project will be subject to school impact fees.

The DOE would like to know the number of single-family and multi-family residential units planned for the project.

Thank you for the opportunity to comment. If you have any questions, please call Jeremy Kwock of the Facilities Development Branch at (808) 377-8301.

Very truly yours,

A handwritten signature in cursive script, appearing to read "K. Matayoshi".

Kathryn S. Matayoshi
Superintendent

KSM:jmb

c: Randolph Moore, Assistant Superintendent, OSFSS
Bruce Anderson, CAS, Baldwin/Kekaulike/Maui Complex Areas



Landscape Architecture
City & Regional Planning

June 12, 2011

Ms. Kathryn Matayoshi, Superintendent
Department of Education
P.O. Box 2360
Honolulu, HI 96804

Dear Ms. Matayoshi,

RE: Early Consultation Letter for the Proposed Maui Research and Technology
Park Master Plan update, located in Kihei, Maui, Hawaii at TMK's: (2) 2-2-024:1-
9,14-17,31,34; (2) 2-2-002:054 (por.)

Thank you for your letter of October 15, 2010. The Applicant is aware that the proposed project will be subject to school impact fees. The Applicant will provide the proposed number of single-family and multi-family residential units in the forthcoming EIS document, which will be submitted to your department for additional comments.

Thank you again for providing us with your response. Please feel free to call me or Mr. Brett Davis at (808) 242-1955 should you have any questions.

Sincerely yours,

Michael Summers
Senior Associate • Land Planner

CC. Mr. Steve Perkins, Pacific Rim Land, Inc.
Project File 08-132



DEPARTMENT OF
HOUSING AND HUMAN CONCERNS
HOUSING DIVISION
COUNTY OF MAUI

CHARMAINE TAVARES
Mayor

LORI TSUHAKO
Director

JO-ANN T. RIDAO
Deputy Director

35 LUNALILO STREET, SUITE 102 • WAILUKU, HAWAII 96793 • PHONE (808) 270-7351 • FAX (808) 270-6284

October 18, 2010

RECEIVED

OCT 20 2010

CHRIS HART & PARTNERS, INC.
Landscape Architecture and Planning

Cc: Mike 08/132

Mr. Michael Summers
Senior Associate
Chris Hart & Partners, INC.
115 N. Market Street,
Wailuku, Hawaii 96793-1717

Dear Ms. Summers:

Subject: Early Consultation Letter for the Proposed Maui Research and Technology Park Master Plan update located in Kihei, Maui, Hawaii.
TMK's (2) 2-2-024:1-9, 14-17, 31, 34; (2) 2-2-002:054 (por).

Thank you for the opportunity to review the Environmental Assessment / Environmental Impact Statement Preparation Notice for the subject property. At this time, the Department would like to reserve commenting on this project until the review of the Draft EIS has been completed.

Please call Mr. Buddy Almeida of our Housing Division at 270-7356 if you have any questions.

Sincerely,

WAYDE T. OSHIRO
Housing Administrator

cc: Director of Housing and Human Concerns



Landscape Architecture
City & Regional Planning

June 10, 2011

Mr. Wayde Oshiro, Administrator
Department of Housing and Human Concerns
35 Lunalilo St. Suite 102
Wailuku, HI 96793

Dear Mr. Oshiro,

RE: Early Consultation Letter for the Proposed Maui Research and Technology Park Master Plan update, located in Kihei, Maui, Hawaii at TMK's: (2) 2-2-024:1-9,14-17,31,34; (2) 2-2-002:054 (por.)

Thank you for your letter of October 18, 2010 indicating that your Department will reserve commenting on the proposed project until the Draft EIS is distributed. We look forward to receiving your comments at that time.

Thank you again and please feel free to call me or Mr. Brett Davis at (808) 242-1955 should you have any questions.

Sincerely yours,

Michael Summers
Senior Associate • Land Planner

CC. Mr. Steve Perkins, Pacific Rim Land, Inc.
Project File 08-132

LINDA LINGLE
GOVERNOR



MICHAEL D. FORMBY
INTERIM DIRECTOR

Deputy Directors
FRANCIS PAUL KEENO
JIRO A. SUMADA

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

IN REPLY REFER TO:
DIR 1191
STP 8.0262

October 20, 2010

Mr. Michael Summers
Senior Associates
Chris Hart & Partners, Inc.
115 N. Market Street
Wailuku, Hawaii 96793-1717

Dear Mr. Summers:

Subject: Maui Research and Technology Park (MRTP)
Master Plan Update, Early Consultation

Thank you for providing the subject plan for the State Department of Transportation's (DOT) review and comments. DOT understands the applicant is seeking to update the Master Plan for the Maui Research & Technology Park. The vision is to transform the current single use large lot research and technology campus into an integrated and vibrant mixed use community focused around a regional high technology employment base.

DOT's comments in its letters STP 8.3469 dated December 9, 2009 (copy attached) regarding the MRTP Regency Pacific Skilled Nursing and Long Term Care Facility, and STP 8.9182 dated August 9, 1999 (copy attached) regarding the MRTP International Conference Center remain valid.

DOT appreciates the opportunity to provide comments on the subject project. If there are any questions, including the need to meet with DOT staff, please contact Mr. David Shimokawa of the DOT Statewide Transportation Planning Office at telephone number (808) 831-7976.

Very truly yours,

Francis Paul Keeno

MICHAEL D. FORMBY
Interim Director of Transportation

Attachments: Ltr. STP 8.3469 dtd. 12/09/09
Ltr. STP 8.9182 dtd. 8/01/99

EKT:cc

bc: HWY, HWY-P (w/ incoming), STP (ET)

RECEIVED

OCT 27 2010

CHRIS HART & PARTNERS, INC.
Landscape Architecture and Planning

CC: Mike + Beth
08/132

LINDA LINGLE
GOVERNOR



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

BRENNON T. MORIOKA
DIRECTOR

Deputy Directors
MICHAEL D. FORMBY
FRANCIS PAUL KEENO
BRIAN H. SEKIGUCHI
JIRO A. SUMADA

IN REPLY REFER TO:
STP 09-145
STP 8.3469

December 9, 2009

Mr. Jeffrey S. Hunt, AICP, Director
Department of Planning
County of Maui
250 South High Street
Wailuku, Hawaii 96793

Dear Mr. Hunt:

Subject: Maui Research and Technology Park (MRTP) Partners, LLC
Regency Pacific Skilled Nursing and Long Term Care Facility
Accessory Use Permit (ACC 2009/0002)

Thank you for requesting the State Department of Transportation's (DOT) review of the subject project.

DOT understands the subject project proposes to construct and operate a new 50,000 - 60,000 square foot skilled nursing and long term care facility. The proposed, subject facility will primarily provide services for elderly residents who require on-going nursing care or rehabilitation services. Proposed services include long term care for approximately 100 in-patient beds as well as adult medical daycare. The applicant is also preparing a master plan intended to help MRTP transition from a stand-alone research and technology campus to an integrated, mixed-use community focused on a regional high-technology employment base. The MRTP is located east (mauka) of Piilani Highway near the eastern terminus of Lipoa Parkway in Kihei, Maui, Hawaii. Access to the MRTP is provided by Lipoa Parkway via the State highway, Piilani Highway.

The DOT Highways Division is concluding its review of the subject project and DOT will provide its comments when this review is completed.

DOT appreciates the opportunity to provide these interim comments. If there are any questions, please contact Mr. David Shimokawa of the DOT Statewide Transportation Planning Office at telephone number (808) 587-2356.

Very truly yours,

Francis Paul Keemo

for BRENNON T. MORIOKA, Ph.D., P.E.
Director of Transportation

SLP:km

bc: HWY-M, HWY-P, STP(SLP)

STP(EKT)

99- LUPRA-110

DIR 588
STP 8.9182

August 9, 1999

Mr. John E. Min
Director
Department of Planning
County of Maui
250 South High Street
Wailuku, Hawaii 96793

Dear Mr. Min:

Subject: Maui Research and Technology Park International Conference Center, Kihei
Land Use Amendment (DBA 970005) and Change in Zoning (CIZ 970010)
TMK: 2-2-2; POR. 54

Thank you for your transmittal requesting our comments on the subject applications.

The traffic consultant should reassess the impact the proposed project will have on the roadway system, particularly at the intersection of Piilani Highway and Lipoa Street/Parkway. The Traffic Impact Study dated August 1996 and subsequent updates to the study assumed that the project users would not be traveling during the peak hours; and as such, concluded that the project will not impact the surrounding roadway network.

The traffic in the area is relatively constant and additional traffic outside of the peak hours may have a significant impact. The traffic study should address the impact of the project and recommend required mitigation measures.

We appreciate the opportunity to provide comments.

Very truly yours,


KAZU HAYASHIDA
Director of Transportation

EKT:km

c: HWY-P, STP(EKT)



**CHRIS
HART**
& PARTNERS, INC.

Landscape Architecture
City & Regional Planning

October 25, 2011

Mr. Glenn Okimoto, Director
State of Hawaii
Dept. of Transportation
869 Punchbowl St.
Honolulu, HI 96813-5097

Dear Mr. Okimoto,

RE: Early Consultation Letter for the Proposed Maui Research and Technology Park Master Plan update, located in Kihei, Maui, Hawaii at TMK's: (2) 2-2-024:1-9,14-17,31,34; (2) 2-2-002:054 (por.)

Thank you for your letter of October 20, 2010 indicating that the comment letter dated August 9, 1999 is still valid. The Applicant has retained a Traffic Engineer to prepare a current Traffic Impact Assessment Report that will be included in the EIS document which will be sent to your office for review.

Thank you again for providing us with your response. Please feel free to call me or Mr. Brett Davis at (808) 242-1955 should you have any questions.

Sincerely yours,

Michael Summers
Senior Associate • Land Planner

CC. Mr. Steve Perkins, Pacific Rim Land, Inc.
Project File 08-132



STATE OF HAWAII
DEPARTMENT OF HEALTH
P.O. BOX 3378
HONOLULU, HAWAII 96801-3378

In reply, please refer to:
EMD / CWB

10039PJF.10

October 20, 2010

RECEIVED

OCT 21 2010

Mr. Michael Summers
Senior Associate
Chris Hart & Partners, Inc.
115 N. Market Street
Wailuku, Island of Maui, Hawaii 96793-1717

CHRIS HART & PARTNERS, INC.
Landscape Architecture and Planning

CU mike
08/13/2

Dear Mr. Summers:

**SUBJECT: Early Consultation Request for the Proposed Maui Research
and Technology Park Master Plan Update
Kihei, Island of Maui, Hawaii
TMK: (2) 2-2-024:001-009, 031-034 and (2) 2-2-002:054**

The Department of Health, Clean Water Branch (CWB), has reviewed the subject document and offers these comments on your project.

Please note that our review is based solely on the information provided in the subject document and its compliance with the Hawaii Administrative Rules (HAR), Chapters 11-54 and 11-55. You may be responsible for fulfilling additional requirements related to our program. We recommend that you also read our standard comments on our website at:
<http://www.hawaii.gov/health/environmental/env-planning/landuse/CWB-standardcomment.pdf>.

1. Any project and its potential impacts to State waters must meet the following criteria:
 - a. Antidegradation policy (HAR, Section 11-54-1.1), which requires that the existing uses and the level of water quality necessary to protect the existing uses of the receiving State water be maintained and protected.
 - b. Designated uses (HAR, Section 11-54-3), as determined by the classification of the receiving State waters.
 - c. Water quality criteria (HAR, Sections 11-54-4 through 11-54-8).

2. You are required to obtain a National Pollutant Discharge Elimination System (NPDES) permit for discharges of wastewater, including storm water runoff, into State surface waters (HAR, Chapter 11-55). For the following types of discharges into Class A or Class 2 State waters, you may apply for an NPDES general permit coverage by submitting a Notice of Intent (NOI) form:

- a. Storm water associated with construction activities, including clearing, grading, and excavation, that result in the disturbance of equal to or greater than one (1) acre of total land area. The total land area includes a contiguous area where multiple separate and distinct construction activities may be taking place at different times on different schedules under a larger common plan of development or sale. An NPDES permit is required before the start of the construction activities.
- b. Hydrotesting water.
- c. Construction dewatering effluent.

You must submit a separate NOI form for each type of discharge at least 30 calendar days prior to the start of the discharge activity, except when applying for coverage for discharges of storm water associated with construction activity. For this type of discharge, the NOI must be submitted 30 calendar days before to the start of construction activities. The NOI forms may be picked up at our office or downloaded from our website at:

<http://www.hawaii.gov/health/environmental/water/cleanwater/forms/genl-index.html>.

3. For types of wastewater not listed in Item No. 2 above or wastewater discharging into Class 1 or Class AA waters, you may need an NPDES individual permit. An application for an NPDES individual permit must be submitted at least 180 calendar days before the commencement of the discharge. The NPDES application forms may be picked up at our office or downloaded from our website at:

<http://www.hawaii.gov/health/environmental/water/cleanwater/forms/indiv-index.html>.

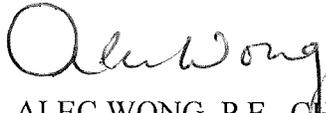
4. Please note that all discharges related to the project construction or operation activities, whether or not NPDES permit coverage and/or Section 401 Water Quality Certification are required, must comply with the State's Water Quality Standards. Noncompliance with water quality requirements contained in HAR, Chapter 11-54, and/or permitting requirements, specified in HAR, Chapter 11-55, may be subject to penalties of \$25,000 per day per violation.

Mr. Michael Summers
October 20, 2010
Page 3

10039PJF.10

If you have any questions, please visit our website at:
<http://www.hawaii.gov/health/environmental/water/cleanwater/index.html>, or contact the
Engineering Section, CWB, at (808) 586-4309.

Sincerely,

A handwritten signature in black ink that reads "Alec Wong". The signature is written in a cursive style with a large, prominent initial "A".

ALEC WONG, P.E., CHIEF
Clean Water Branch

JF:ml



**CHRIS
HART**
& PARTNERS, INC.

Landscape Architecture
City & Regional Planning

October 27, 2011

Mr. Alec Wong P.E., Chief
State of Hawaii, Dept. of Health
Clean Water Branch
P.O. Box 3378
Honolulu, HI 96801-3378

Dear Mr. Wong,

RE: Early Consultation Letter for the Proposed Maui Research and Technology Park Master Plan update, located in Kihei, Maui, Hawaii at TMK's: (2) 2-2-024:1-9,14-17,31,34; (2) 2-2-002:054 (por.)

Thank you for your letter of October 20, 2010. The Applicant is aware that the proposed project must comply with Hawaii Administrative Rules (HAR), Chapters 11-54 and 11-55. Prior to development the Applicant will coordinate with the Department of Health to identify the types of permits that are required for the proposed project, if applicable. In addition we have reviewed the standard comments online and will comply with them during development of the property.

Thank you again for providing us with your comments. Please feel free to call me or Mr. Brett Davis of our office at (808) 242-1955 should you have any questions.

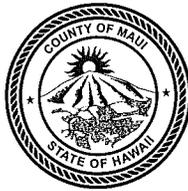
Sincerely yours,

Michael Summers

Senior Associate • Land Planner

CC. Mr. Steve Perkins, Pacific Rim Land, Inc.
Project File 08-132

CHARMAINE TAVARES
MAYOR



JEFFREY A. MURRAY
CHIEF

ROBERT M. SHIMADA
DEPUTY CHIEF

COUNTY OF MAUI
DEPARTMENT OF FIRE AND PUBLIC SAFETY
FIRE PREVENTION BUREAU

313 MANEA PLACE • WAILUKU, HAWAII 96793
(808) 244-9161 • FAX (808) 244-1363

October 20, 2010

Chris Hart & Partners, Inc.
C/O Michael Summers
115 N. Market Street
Wailuku, HI 96793

**Subject: Early Consultation for Proposed Maui Research and
Technology Park Master Plan update
Kihei
TMK: (2) 2-2-024: 1-9, 14-17, 31, 34; and (2) 2-2-002: 054(por)**

Thank you for the opportunity to comment on this subject. At this time, the Fire Prevention Bureau has no specific comments. Our office does reserve the right to comment during the subdivision process when roads and water supply for fire protection improvements will be addressed based on land-use of the area and during any building permit applications.

If you have any questions, you may call me at 244-9161 ext. 23 or fax at 244-1363.

Sincerely,

Captain Paul Haake
Fire Prevention Bureau

RECEIVED

OCT 22 2010

CHRIS HART & PARTNERS, INC.
Landscape Architects

CC: Mike + Brett

08/132



Landscape Architecture
City & Regional Planning

June 12, 2011

Captain Paul Haake
Fire Prevention Bureau
313 Manea Place
Wailuku, HI 96793

Dear Captain Haake,

RE: Early Consultation Letter for the Proposed Maui Research and Technology Park Master Plan update, located in Kihei, Maui, Hawaii at TMK's: (2) 2-2-024:1-9,14-17,31,34; (2) 2-2-002:054 (por.)

Thank you for your letter of October 20, 2010 indicating that your department will reserve commenting on the proposed project until the subdivision process begins and during any building permit applications.

Thank you again and please feel free to call me or Mr. Brett Davis at (808) 242-1955 should you have any questions.

Sincerely yours,

Michael Summers
Senior Associate • Land Planner

CC. Mr. Steve Perkins, Pacific Rim Land, Inc.
Project File 08-132

LINDA LINGLE
GOVERNOR OF HAWAII



LAURA H. THIELEN
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

RECEIVED

OCT 25 2010

CHRIS HART & PARTNERS, INC.
Landscape Architecture and Planning

CC: Mike + Brett

08/132



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

October 21, 2010

Chris Hart & Partners, Inc.
115 N. Market Street
Wailuku, Hawaii 96793-1717

Attention: Mr. Michael Summers, Senior Associate

Ladies and Gentlemen:

Subject: Early Consultation for the Proposed Maui Research and Technology Park
Master Plan Update

Thank you for the opportunity to review and comment on the subject matter. The Department of Land and Natural Resources' (DLNR), Land Division distributed or made available a copy of your report pertaining to the subject matter to DLNR Divisions for their review and comment.

Other than the comments from Division of Forestry & Wildlife, Division of State Parks, Commission on Water Resource Management, Engineering Division, the Department of Land and Natural Resources has no other comments to offer on the subject matter. Historic Preservation will be submitting comments through a separate letter. Should you have any questions, please feel free to call our office at 587-0414. Thank you.

Sincerely,

A handwritten signature in black ink, appearing to read "Russell Y. Tsuji".

Russell Y. Tsuji
Administrator



Landscape Architecture
City & Regional Planning

June 10, 2011

Mr. Russell Y. Tsuji, Administrator
Department of Land and Natural Resources
P.O. Box 621
Honolulu, HI 96809

Dear Mr. Tsuji,

RE: Early Consultation Letter for the Proposed Maui Research and Technology
Park Master Plan update, located in Kihei, Maui, Hawaii at TMK's: (2) 2-2-024:1-
9,14-17,31,34; (2) 2-2-002:054 (por.)

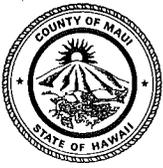
Thank you for your letter of October 21, 2010. On behalf of the Applicant we
have responded to the Division's that had comments on the proposed project.

Thank you again for providing us with your response. Please feel free to call me
or Mr. Brett Davis at (808) 242-1955 should you have any questions.

Sincerely yours,

Michael Summers
Senior Associate • Land Planner

CC. Mr. Steve Perkins, Pacific Rim Land, Inc.
Project File 08-132



POLICE DEPARTMENT
COUNTY OF MAUI



CHARMAINE TAVARES
MAYOR

55 MAHALANI STREET
WAILUKU, HAWAII 96793
(808) 244-6400
FAX (808) 244-6411

GARY A. YABUTA
CHIEF OF POLICE

CLAYTON N.Y.W. TOM
DEPUTY CHIEF OF POLICE

OUR REFERENCE
YOUR REFERENCE

October 23, 2010

Mr. Michael Summers, Senior Associate
Chris Hart & Partners, Inc.
115 N. Market Street
Wailuku, HI 96793

Dear Mr. Summers:

SUBJECT: Early Consultation Letter for the Proposed Maui Research and Technology Park Master Plan update; TMK's: (2) 2-2-024:1-9, 14-17, 31, 34; (2) 2-2-002:054 (por.)

This is in response to your letter dated September 24, 2010, requesting comments on the above subject.

We have reviewed the information submitted for the above mentioned project and would like to offer the enclosed comments. Thank you for allowing us to review this project.

Very truly yours,

Assistant Chief Danny Matsuura
for: Gary A. Yabuta
Chief of Police

Enclosures

c: Kathleen Ross Aoki, Maui County Dept. of Planning

RECEIVED

OCT 27 2010

CHRIS HART & PARTNERS, INC.
Landscape Architecture and Planning

CC: Mike & Beth

08/132

COPY

TO : GARY YABUTA, CHIEF OF POICE, COUNTY OF MAUI
VIA : CHANNELS *Ar D. M. a t o u n*
FROM : BRAD HICKLE, POLICE OFFICER III, DISTRICT VI KIHEI *10/19/10*
SUBJECT : EARLY CONSULTATION IN PREPARATION FOR AN ENVIRONMENTAL IMPACT STATEMENT FOR MAUI RESEARCH AND TECHNOLOGY PARK MASTER PLAN UPDATE

APPLICANT INFORMATION:

The applicant, Maui R&T Partners, LLC. are seeking Early Consultation in preparation for a Environmental Assessment (EA)/Draft Environmental Impact Statement Preparation (EIS).

The document was prepared by Chris Hart & Partners, Inc.

The lands are owned by various land owners. Maui R&T Partners, LLC owns approximately 231.229 acres and Haleakala Ranch is the owner of approximately 123.843 acres and the Roadway lots and lands are privately owned land of approximately 76.801 acres.

The purpose of the EIS will be to examine potential impacts and mitigations measures resulting from implementing a Master Plan Update which will also require a Change In Zoning (CIZ).

IMPACT ON POLICE:

At this time I do not anticipate the CIZ, EA or EIS will impact Police services. If the lands are eventually developed we would like the opportunity to review the future SMA and Community Development Plan for our comments and recommendations.

RECOMMENDATIONS:

I recommend the document be returned to Mr. Michael SUMMERS of Chris Hart & Partners, Inc.

*CONCUR WITH RECOMMENDATIONS.
NOTED + REVIEWED.
M. Summers #7416
10/15/10*

Respectfully Submitted,

Officer Brad Hickle *BH*

10/15/10

13:30 hours

*CONCUR. SUGGEST FUTURE REVIEW WHEN APPROPRIATE.
10/18/10*



Landscape Architecture
City & Regional Planning

June 10, 2011

Chief Gary A. Yabuta
Police Department
55 Mahalani St.
Wailuku, HI 96793

Dear Chief Yabuta,

RE: Early Consultation Letter for the Proposed Maui Research and Technology Park Master Plan update, located in Kihei, Maui, Hawaii at TMK's: (2) 2-2-024:1-9,14-17,31,34; (2) 2-2-002:054 (por.)

Thank you for your letter of October 23, 2010 indicating that your department anticipates the CIZ, EA and EIS will not have an impact to Police services at this time. The application will be submitted to your department again for comments on the EIS.

Thank you and we look forward to your review of the project in the future. Please feel free to call me or Mr. Brett Davis at (808) 242-1955 should you have any questions.

Sincerely yours,

Michael Summers
Senior Associate • Land Planner

CC. Mr. Steve Perkins, Pacific Rim Land, Inc.
Project File 08-132

LINDA LINGLE
GOVERNOR
STATE OF HAWAII



KAULANA H. R. PARK
CHAIRMAN
HAWAIIAN HOMES COMMISSION

ANITA S. WONG
DEPUTY TO THE CHAIRMAN

ROBERT J. HALL
EXECUTIVE ASSISTANT

STATE OF HAWAII
DEPARTMENT OF HAWAIIAN HOME LANDS

P.O. BOX 1879
HONOLULU, HAWAII 96805

RECEIVED

NOV 02 2010

October 26, 2010

CHRIS HART & PARTNERS
Landscape Architecture

CC: Mike Hart

08/132

Mr. Michael Summers
Senior Associate
Chris Hart & Associates, Inc.
115 N. Market Street
Wailuku, Hawaii 96793-1717

Dear Mr. Summers:

Subject: EARLY CONSULTATION FOR THE PROPOSED MAUI RESEARCH AND
TECHNOLOGY PARK MASTER PLAN UPDATE, KIHEI, MAUI, HAWAII

Mahalo for the opportunity to provide comments on the subject proposal. The department fully supports efforts to expand the types of employment available and economic impacts through the Maui Research and Technology Park. These benefits assist our department in supporting the advancement of our native Hawaiian constituents as well.

Please consult with our homestead community associations at Waiohuli and Keokea. Through our regional planning process, these communities have identified as a priority project the need for discussions among stakeholders on a vehicular access to connect Waiohuli-Keokea with Kihei. The subject project may affect this priority project.

If you have any questions or want to discuss this further, please contact Darrell Yagodich of our Planning Office at 620-9481 or at darrell.c.yagodich@hawaii.gov.

Aloha and mahalo,

Handwritten signature of Kaulana H.R. Park in black ink.

Kaulana H.R. Park, Chairman
Department of Hawaiian Home Lands

Cc; Robin Newhouse, Keokea Homesteaders Association
Elvin Kamoku, Waiohuli Homesteaders Association
Donna Pua Gomes, Project Manager, Waiohuli Community Center



Landscape Architecture
City & Regional Planning

October 25, 2011

Mr. Albert "Alapaki" Nahale-a, Chairman
Department of Hawaiian Home Lands
P.O. Box 1879
Honolulu, HI 96805

Dear Mr. Hahale-a,

RE: Early Consultation Letter for the Proposed Maui Research and Technology Park Master Plan update, located in Kihei, Maui, Hawaii at TMK's: (2) 2-2-024:1-9,14-17,31,34; (2) 2-2-002:054 (por.)

Thank you for your letter of October 26, 2010. The Maui Research and Technology Park owners are committed to a regional planning process that will include stakeholders including the surrounding communities. The Applicant will notify the Keokea and Waiohuli Homesteaders Associations of future public meetings about the proposed project.

Thank you again for providing us with your comments. Please feel free to call me or Mr. Brett Davis of our office at (808) 242-1955 should you have any questions.

Sincerely yours,

Michael Summers
Senior Associate • Land Planner

CC. Mr. Steve Perkins, Pacific Rim Land, Inc.
Project File 08-132

PHONE (808) 594-1888



STATE OF HAWAII
OFFICE OF HAWAIIAN AFFAIRS
711 KAPI'OLANI BOULEVARD, SUITE 500
HONOLULU, HAWAII 96813

FAX (808) 594-1865

RECEIVED

NOV 08 2010

CHRIS HART & PARTNERS, INC.
Landscape Architecture and Planning

CC: Mike & Brett

HRD10/5276 08/1/32

October 27, 2010

Michael Summers, Senior Associate
Chris Hart & Partners, Inc.
115 N. Market Street
Wailuku, Hawai'i 96793-1717

**RE: Environmental Impact Statement Preparation Notice
Maui Research and Technology Park Master Plan update
Kihei, Island of Maui**

Aloha e Michael Summers,

The Office of Hawaiian Affairs (OHA) is in receipt of your September 24, 2010 request for comments on an Environmental Impact Statement Preparation Notice for the Maui Research and Technology Park (MRTP) Master Plan update (update).

The forthcoming draft environmental impact statement (DEIS) will be the primary support document for a petition to the State Land Use Commission requesting a District Boundary Amendment, an amendment to the Kihei-Makena Community Plan and a County of Maui Change in Zoning. The update will guide the development of the 432 acres the MRTP encompasses into a mixed use community.

We have no specific comments at this time and look forward to reviewing the DEIS. Should you have any questions, please contact Keola Lindsey at 594-0244 or keolal@oha.org.

'O wau iho nō me ka 'oia 'i'o,

A handwritten signature in black ink, appearing to read "Clyde W. Nāmu'o".

Clyde W. Nāmu'o
Chief Executive Officer

C: OHA- Maui Community Resources Coordinator



Landscape Architecture
City & Regional Planning

June 10, 2011

Mr. Clyde W. Namu'o, Chief Executive Officer
Office of Hawaiian Affairs
711 Kapi'olani Blvd. Suite 500
Honolulu, HI 96813

Dear Mr. Clyde W. Namu'o,

RE: Early Consultation Letter for the Proposed Maui Research and Technology
Park Master Plan update, located in Kihei, Maui, Hawaii at TMK's: (2) 2-2-024:1-
9,14-17,31,34; (2) 2-2-002:054 (por.)

Thank you for your letter of October 27, 2010 indicating that your department
has no comment at this time and that your department will review the
forthcoming draft EIS document.

Thank you and we look forward to your review of the project in the future.
Please feel free to call me or Mr. Brett Davis at (808) 242-1955 should you have
any questions.

Sincerely yours,

Michael Summers
Senior Associate • Land Planner

CC. Mr. Steve Perkins, Pacific Rim Land, Inc.
Project File 08-132



United States Department of the Interior



FISH AND WILDLIFE SERVICE
Pacific Islands Fish and Wildlife Office
300 Ala Moana Boulevard, Room 3-122, Box 50088
Honolulu, Hawaii 96850

In Reply Refer To:
2010-TA-0527

OCT 28 2010

Mr. Michael Summers
Senior Associate
Chris Hart & Partners, Inc.
115 North Market Street
Wailuku, Hawaii 96793

Subject: Technical Assistance for the Environmental Impact Statement Preparation Notice
for the Proposed Maui Research and Technology Park Master Plan Update, Maui

Dear Mr. Summers:

We received your letter, dated September 24, 2010, on September 28, 2010, requesting our comments regarding Maui Research Partners, LLC's plan to update the Master Plan for the Maui Research and Technology Park in Kihei, Maui. An Environmental Impact Statement (EIS) preparation notice enclosed in your letter included an Environmental Assessment addressing the project. The proposed action entails the construction of a mix of housing, office, civic, live-work, park, and retail facilities on 58 acres of the project site, development of a "Village Center" flanked by 100 acres of residential development. The site is located on the dry leeward slopes of Haleakala and it is currently managed as pastureland dominated by kiawe (*Prosopis pallid*) and buffelgrass (*Cenchrus ciliaris*).

Based on the information in your EIS preparation notice and pertinent information in our files including data compiled by the Hawaii Biodiversity and Mapping Program, we compiled a list of species and critical habitat known to occur in the vicinity of the proposed project (Table 1). Other rare endemic plant species in the vicinity include *Achyranthes splendens* var. *splendens*, *Capparis sandwichiana*, *Portulaca villosa*, and *Reynoldsia sandwicensis*.

The project area is located immediately downslope from one of the most intact examples of native dryland forests remaining in Hawaii. The forest is on State of Hawaii Department of Hawaiian Home lands property and portions of it are actively managed to conserve natural and cultural resources with funding from the Hawaii Department of Land and Natural Resources, the U.S. Fish and Wildlife Service, the U.S. Geological Survey Biological Resources Discipline, the National Park Service, and volunteer groups.

CC: MIKE + BRET

RECEIVED

NOV 01 2010

TAKE PRIDE
IN AMERICA 

CHRIS HART & PARTNERS, INC.
Landscape Architecture and Planning

081132 -

Table 1. Species and critical habitat known to occur in the project vicinity; increased wildfire threat may result in adverse effects to listed species and critical habitat outside the project footprint.

| Common Name | Scientific Name | Status |
|------------------------------|--|--|
| <u>Mammals</u> | | |
| Hawaiian hoary bat | <i>Lasiurus cinereus semotus</i> | Endangered |
| <u>Birds</u> | | |
| Hawaiian coot | <i>Fulica alai</i> | Endangered |
| Hawaiian duck | <i>Anas wyvilliana</i> | Endangered |
| Hawaiian goose | <i>Branta sandvicensis</i> | Endangered |
| Hawaiian petrel | <i>Pterodroma phaeopygia sandwichensis</i> | Endangered |
| Hawaiian stilt | <i>Himantopus mexicanus knudseni</i> | Endangered |
| Newell's shearwater | <i>Puffinus auricularis newelli</i> | Threatened |
| <u>Insects</u> | | |
| Anthricinan yellow-faced bee | <i>Hylaeus anthracinus</i> | Petitioned for listing |
| Assimulans yellow-faced bee | <i>Hylaeus assimulans</i> | Petitioned for listing |
| Blackburn's sphinx moth | <i>Manduca blackburni</i> | Endangered |
| Easy yellow-faced bee | <i>Hylaeus facilis</i> | Petitioned for listing |
| Longhead yellow-faced bee | <i>Hylaeus longiceps</i> | Petitioned for listing |
| Hilaris yellow-faced bee | <i>Hylaeus hilaris</i> | Petitioned for listing |
| <u>Plants</u> | | |
| Awikiwiki | <i>Canavalia pubescens</i> | Candidate |
| Native yellow hibiscus | <i>Hibiscus brackenridgei</i> | Endangered |
| No common name | <i>Bonamia menziesii</i> | Endangered |
| <u>Critical Habitat</u> | | |
| Blackburn's sphinx moth | <i>Manduca blackburni</i> | 3,965-acre Unit 1: adjacent to project area |

We recommend you incorporate the following measures into the project EIS to minimize potential impacts to these resources:

Avoid Direct Impacts to Hawaiian Hoary Bats: Although the botanical and fauna surveys conducted at the site indicated Hawaiian hoary bats were not found on the property, these animals are known to have large home ranges which may result in this species' intermittent use of the subject property. Hawaiian hoary bats roost in exotic and native woody vegetation at heights greater than 15 feet. If trees or shrubs suitable for bat roosting are cleared during the bat breeding season (April to August), there is a risk that breeding bats could inadvertently be harmed or killed. Young bats, which are incapable of flight, are particularly vulnerable during the bat birthing and pup rearing season (May 15 through August 15). To minimize potential impacts to the Hawaiian hoary bat, woody plants greater than 15 feet tall should not be removed or trimmed between May 15 and August 15 throughout the development and ongoing operation of the proposed project.

Minimize Light Impacts to Seabirds: The Newell's shearwater and Hawaiian petrel may traverse the project site in flights between their mountain nesting sites and the ocean. Outdoor lighting, such as street lights can adversely impact listed seabird species and migratory seabird species protected under the Migratory Bird Treaty Act [16 U.S.C. 703-712]. By attracting seabirds, artificially-lighted areas can disorient the birds and result in their exhaustion or collision with objects such as utility lines, guy wires, and towers that protrude above the vegetation layer. Once grounded, they are vulnerable to predators or collision with vehicles. Any increase in night-time lighting, particularly during each year's peak fallout period (September 15 through December 15), could result in seabird injury or mortality. Therefore, we recommend minimizing the use of outdoor lights. Where outdoor lights are necessary, the level of illumination should be minimized and the light should be shielded so the bulb can be seen only from below. Enclosed, please find a one-page enclosure (Enclosure 1) to assist you with your selection of light fixtures.

Minimize Attraction and Impacts to other Listed Birds: The endangered Hawaiian goose, Hawaiian coot, Hawaiian duck, and Hawaiian stilt may be attracted to drainage ditches, golf course water features, and mowed grass areas in the project site increasing their vulnerability to collision with vehicles, injuries due to golf operations, and exposure to domesticated animal predators. To minimize potential project impacts to these species, we recommend standing water be minimized, free movement of pets be prohibited, public education programs to discourage the feeding of feral animals be implemented, and sturdy animal-proof garbage containers be used to prevent increases in the populations of house mice, rats, mongoose, and feral cats. These measures should be incorporated into any project or community rules and regulations to ensure they are implemented by future occupants of project areas.

Avoid or Address Impacts to the Blackburn's Sphinx Moth: The Blackburn's sphinx moth is likely to breed and feed within the area proposed for development. The adult moth feeds on nectar from native plants including beach morning glory (*Ipomoea pes-caprae*), iliee (*Plumbago zeylanica*), maiapilo (*Capparis sandwichiana*), and the larvae feed upon non-native tree tobacco (*Nicotiana glauca*) and the native aiea (*Nothocestrum latifolium*). Other host plants in the Solanaceae family include non-native commercial tobacco (*Nicotiana tabacum*), eggplant (*Solanum melongena*), tomato (*Lycopersicon esculentum*), and possibly jimson weed (*Datura stramonium*). Larvae of *Manduca sexta*, a close relative of the Blackburn's sphinx moth, are known to feed on a wide variety of taxa in the Solanaceae family including: sweet and chili pepper (*Capsicum* spp.), ornamental plants (*Cestrum* spp. and *Lycium* spp.), tomatillo (*Cymphomandra* spp.), petunia (*Petunia* spp.), tomatillo and ground cherry (*Physalis* spp.), *Solanandra* spp., and *Solanum* spp. (potato, eggplant, Christmas cherry, nightshade). The Blackburn's sphinx moth may also use these plants. Blackburn's sphinx moth pupae are known to lay dormant in the soil within 33 feet of host plants for one-year periods. To avoid potential impacts to the Blackburn's sphinx moth, we recommend you have a qualified biologist survey the project area for the presence of the Blackburn's sphinx moth and its potential host plants. We recommend that a knowledgeable entomologist and botanist thoroughly survey the entire site for Blackburn's sphinx moth and potential host plants used by this species during the wettest portion of the year (usually November-April). If host plants are found, please coordinate with our office and the State of Hawaii Department of Land and Natural Resources.

Survey for Yellow-Faced Bees and Protected Plant Species: We recommend a qualified entomologist survey the site for the five species of yellow-faced bee petitioned for listing to determine the extent of their occurrence on the project site. The project's Botanical and Fauna Survey, prepared by Robert Hobby in October 2008, indicates no threatened or endangered plants were found in the areas of the project that were sampled during the dry season. We recommend that a knowledgeable botanist thoroughly survey the entire site for listed and candidate plant species during the wettest portion of the year (usually November-April).

Minimize Wildfire Impacts: Your Botanical and Fauna Survey document indicates that wildfires have burned the project area a number of times. The subject property is adjacent to one of the most intact examples of native dryland forests remaining in Hawaii, which serves as critical habitat for the Blackburn's sphinx moth. This native forest and other nearby natural resources on the leeward slopes of Haleakala would be severely impacted by a wildfire. Therefore, it is critical that actions related to your project do not result in fire impacts outside the project footprint. Along the upper edge of the project area, you should develop and maintain a drivable firebreak in conjunction with a 150-foot wide fuelbreak within which grass fuel loading does not exceed one ton per acre. In addition, we recommend you work closely with the Maui County Department of Fire and Public Safety wildland fire management specialists to minimize the risk of wildfires occurring outside the project footprint, as a result of any increases in local population that may result from the project. Preliminary calculations reviewed at the June 9, 2009, Maui Wildfire Coordinating Group meeting indicate that current fire suppression response is inadequate to achieve initial attack containment of wildfires burning under average summer fire danger conditions. We recommend you ensure fuel treatments, in combination with fire suppression responses, are adequate to ensure wildfires do not burn listed species and critical habitat in the vicinity of the project footprint.

Minimize the Spread of Invasive Species: Hawaii's native ecosystems are heavily impacted by exotic invasive plants. Whenever possible we recommend using native plants for landscaping purposes. If native plants do not meet the landscaping objectives, we recommend choosing species that are thought to have a low risk of becoming invasive. The following websites are good resources to use when choosing landscaping plants: Pacific Island Ecosystems at Risk (<http://www.hear.org/Pier/>), Hawaii-Pacific Weed Risk Assessment (http://www.botany.hawaii.edu/faculty/daehler/wra/full_table.asp) and Global Compendium of Weeds (www.hear.org/gcw).

Mr. Michael Summers

5

We hope this information assists you in developing a comprehensive and thorough Draft EIS. We appreciate your efforts to conserve endangered species. If you have questions, please contact Michelle Bogardus or Dawn Greenlee, Consultation and Habitat Conservation Planning Program Biologists (phone: 808-792-9400, fax: 808-792-9400). Please note that future correspondence should be addressed to me.

Sincerely,

A handwritten signature in black ink, appearing to read "Loyal Mehrhoff". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

for Loyal Mehrhoff
Field Supervisor

Enclosure

cc:

Scott Fretz, Hawaii Department of Land and Natural Resources, Division of Forestry and Wildlife, Honolulu



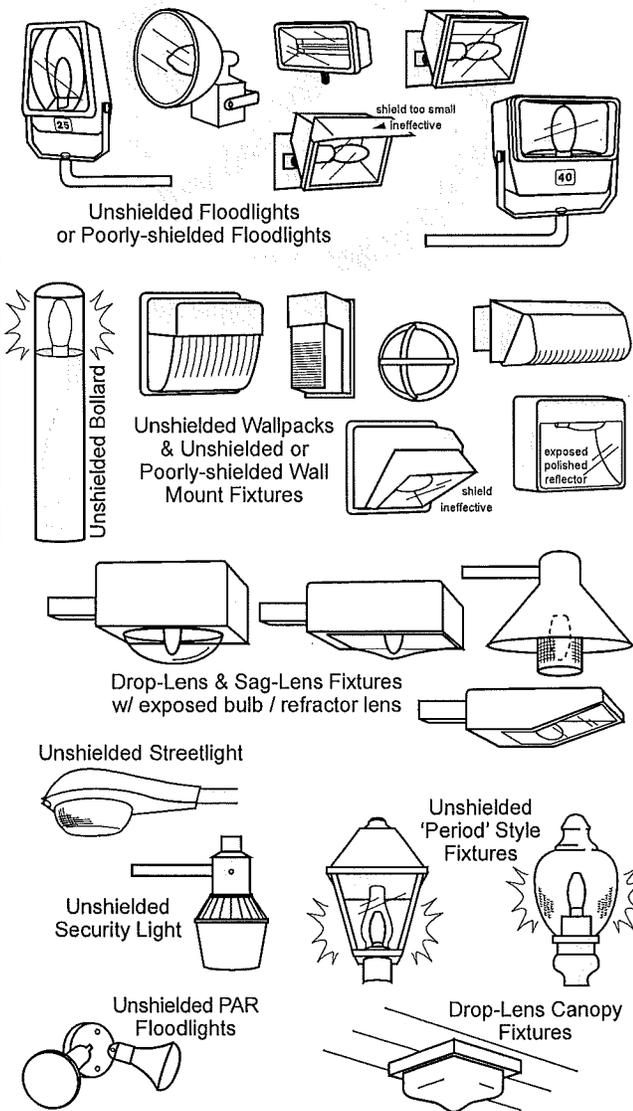
SEABIRD FRIENDLY LIGHTING SOLUTIONS

Help eliminate seabird light attraction. Select the best fixture for your application using this guide. Avoid uplighting, always shield floodlights, and aim downlights carefully to avoid light trespass. For more information go to www.kauai-seabirdhcp.info.



Unacceptable / Discouraged

Fixtures that produce glare and light trespass



Unshielded Floodlights or Poorly-shielded Floodlights

Unshielded Wallpacks & Unshielded or Poorly-shielded Wall Mount Fixtures

Drop-Lens & Sag-Lens Fixtures w/ exposed bulb / refractor lens

Unshielded Streetlight

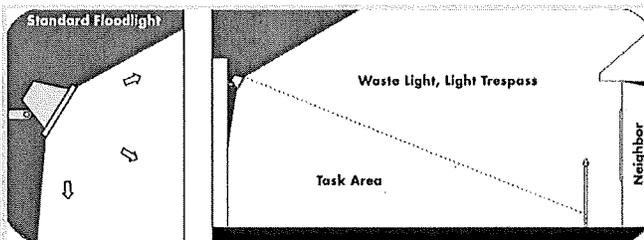
Unshielded Security Light

Unshielded PAR Floodlights

Unshielded 'Period' Style Fixtures

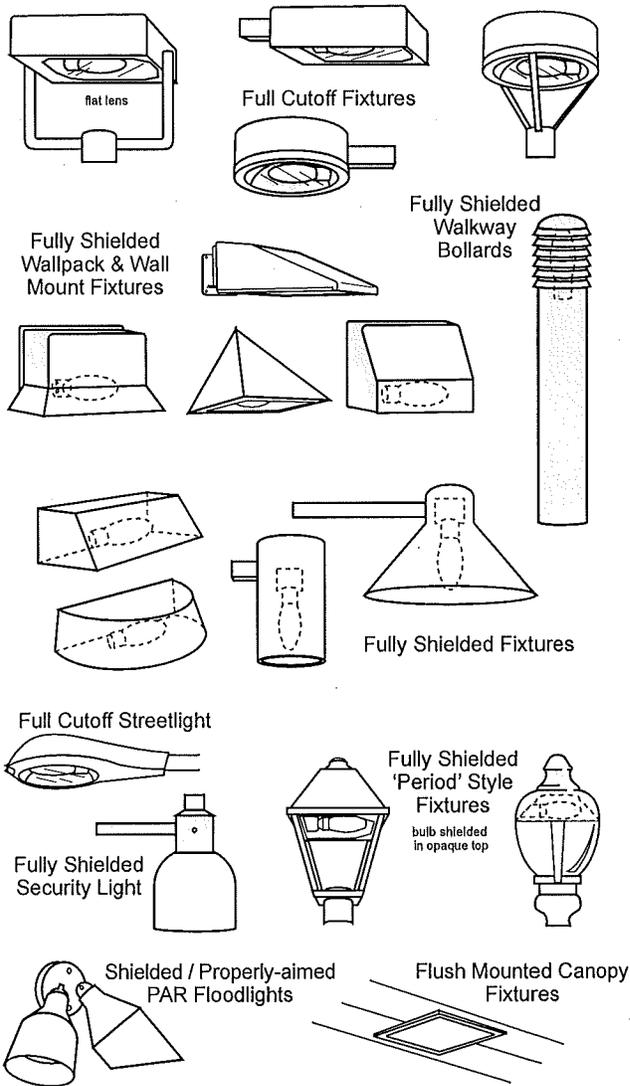
Drop-Lens Canopy Fixtures

Unshielded floodlight that is angled incorrectly



Acceptable

Fixtures that shield the light source to minimize glare and light trespass and to facilitate better vision at night



Full Cutoff Fixtures

Fully Shielded Wallpack & Wall Mount Fixtures

Fully Shielded Walkway Bollards

Fully Shielded Fixtures

Full Cutoff Streetlight

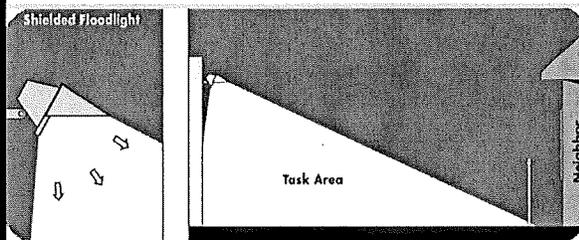
Fully Shielded Security Light

Fully Shielded 'Period' Style Fixtures
bulb shielded in opaque top

Shielded / Properly-aimed PAR Floodlights

Flush Mounted Canopy Fixtures

Shielded floodlight that is angled correctly



Illustrations from
www.darksky.org and
www.darkskysociety.org



Landscape Architecture
City & Regional Planning

April 27, 2011

Loyal Mehrhoff, Field Supervisor
Pacific Islands Fish and Wildlife Office
Fish and Wildlife Service
US Department of the Interior
300 Ala Moana Boulevard, Room 3-122, Box 50088
Honolulu, Hawaii 96850

Subject: Technical Assistance for the Environmental Impact Statement Preparation
Notice for the Proposed Maui Research and Technology Park Master Plan
Update, Maui

Dear Dr. Mehrhoff,

I am responding to your letter dated 28 October 2010 (2010-TA-0527) regarding Maui R&T Partners, LLC plans to update the Master Plan for the Maui Research and Technology Park (MRTP) in Kīhei, Maui (Appendix A). Based on the concerns you expressed, we tasked SWCA Environmental Consultants to conduct additional botanical and wildlife reconnaissance surveys of the properties on February 23 and March 31, 2011.

Two of the 12 plant species identified on the property by Robert Hobdy in October 2008 are indigenous to Hawaii ('ilima and 'uhaloa). Hobdy noted that 'ilima was rarely observed on the property, and 'uhaloa was uncommon there. Both Hobdy and SWCA found the area to be dominated by non-native kiawe and buffelgrass. SWCA found an additional nine plant species not previously reported by Hobdy, all of which were non-native (Appendix B). *Ipomoea obscura*, a possible host plant for adult *Manduca blackburni*, was found to be rare; however, no species confirmed as larval host plants for *M. blackburni* were found within the MRTP properties. No additional species of wildlife other than those reported by Hobdy were observed by SWCA within the properties in

February and March 2011. No listed or candidate endangered species of plants or animals were observed within the property.

None of the species listed in Table 1 of your 28 October 2010 letter were found within the MRTP properties. The easternmost boundaries of the MRTP property lay roughly two linear miles downslope from the westernmost edge of the final boundary for the Puu O Kali Critical Habitat Unit for *Manduca blackburni* (as identified in 68 FR 111 34710-34766, June 10, 2003) and the Puu O Kali Preserve. The vacant lands separating the two areas are privately owned and dominated by buffelgrass and kiawe. In response to your concerns, Maui R&T Partners, LLC intends to incorporate the following measures into the project EIS to minimize potential impacts.

Avoid Direct Impacts to Hawaiian Hoary Bats

To minimize the potential impacts to the Hawaiian hoary bat, woody plants greater than 15 feet tall will not be removed or trimmed between July 1 and August 15 throughout the development and ongoing operation of the proposed project. These dates are fully consistent with the restrictions recommended to prevent harm to non-volant juvenile bats (F. Bonnaccorso, USGS, letter to D. Greenlee, USFWS), and have been endorsed by the Fish and Wildlife Service during clearing of non-native vegetation for the Kahuku Wind Power project and other construction projects.

Minimize Light Impacts to Seabirds

Outdoor lighting will be minimized to the extent practicable to help avoid creating an attractive nuisance to Newell's shearwaters and Hawaiian petrels that might transit over the property at night. Outdoor lights will be shielded in accordance with the guidelines for light fixtures provided with your 28 October 2010 letter.

Minimize Attraction and Impacts to Listed Birds

Expansion of the MRTP will not involve the creation of golf course(s) or open water features. Tenants will be expected to comply with Maui County leash laws. Maui R&T Partners, LLC will institute a pest control program administered by groundskeepers aimed primarily at rodent and feral animal control.

Avoid or Address Impacts to the Blackburn's Sphinx Moth

No known larval host plants for the Blackburn's sphinx moth have been observed within the MRTP properties. A single species of non-native morning glory, *Ipomoea obscura*, was found to be rare on the property. The Fish and Wildlife Service (FWS) states that all species of *Ipomoea* may be host plants for adult Blackburn's sphinx moths (68 FR 111 34710-34766, June 10, 2003). However, given the rarity of *Ipomoea* here and the absence of larval host plants, we conclude that Blackburn's sphinx moths and their habitats will not be impacted by the MRTP.

Survey for Yellow-Faced Bees and Protected Plant Species

Biologists from SWCA Environmental Consultants surveyed the MRTP properties again in February and March 2011, and found no listed or candidate endangered plants species. Dr. Karl Magnacca has indicated that these rare bees are so far only known from areas *dominated* by native plant communities (K. Magnacca, University of Hawaii at Hilo, personal communication). Since the MRTP is dominated by non-native grasses and scrub vegetation and 'ilima is uncommon here, it is highly unlikely that the MRTP properties are habitat for Hawaiian yellow-faced bees.

Minimize Wildlife Impacts

During project construction, measures will be taken to maintain a sufficient fire break along the boundaries of the proposed MRTP expansion. When completed, the MRTP will completely remove all non-native grass, weed, and scrub fuels from an area of approximately 432 acres. Undeveloped lands immediately adjacent to the northern, and eastern and southern boundaries of the MRTP are owned by Kaonoulu Ranch and Haleakala Ranch, respectively. These lands serve as a defacto fire break for MRTP because they are currently zoned Ag and are actively grazed by cattle. Grazing plays a key role in minimizing fuel loads on privately owned lands outside the project footprint. The MRTP is currently serviced by the Kihei Fire Station which is located approximately 1.5 miles from the MRTP. Additional fire control support is also available from Windward Helicopters and Pacific Helicopters at the Kahului Airport; however, response times can vary greatly. The completed MRTP will have fire hydrants and water pressures as required by law to service the area.

Minimize the Spread of Invasive Species

Mr. Loyal Mehrhoff, Field Supervisor
Maui R&T Park
Response Letter
December 15, 2010
Page 4 of 4

During land clearing and construction associated with expansion of the MRTP, care will be taken to prevent the invasion of disturbed areas by noxious invasive weed species, non-native tree tobacco, and other potential non-native host plants of the Blackburn's sphinx moth. However, to minimize the potential for introducing new invasive plants to the project area, Maui R&T Partners, LLC would ensure that off-site sources of revegetation materials (seed mixes, gravel, mulches, etc.) are certified weed-free. All areas that are hydroseeded would be monitored for six months after hydroseeding to ensure removal of any invasive plants that have established from seeds inadvertently introduced as part of the seed mixes. Building supplies imported to Maui for construction will be regularly inspected at Kahului Harbor for presence of alien species. We will employ a palette of suitable native plant species which are known to occur within the natural dry scrubland habitats native to the Kīhei area for landscaping. To the extent practicable, we will utilize seeds of native species previously harvested from the Kīhei environs and available from local nurseries and related sources. Specific species suitable for use can include, but may not be limited to, koai'a (*Acacia koaia*), native wiliwili (*Erythrina sandwicensis*), kolomana (*Senna gaudichaudii*), and kou (*Cordia subcordata*). Other native plants, such as 'a'ali'i (*Dodonea viscosa*), 'āhinahina (*Achyranthes splendens var. rotunda*), 'āwīkīwīkī (*Canavalia pubescens*), kulu'i (*Nototrichium sandwicense*), maiapilo (*Capparis sandwichiana*), naio (*Myoporum sandwicense*), 'ōhai (*Sesbania tomentosa*), pili (*Heteropogon contortus*), and ti leaf (*Cordyline fruticosa*) and other plant species identified in the Maui County Planting Plan can be used throughout the site to the extent possible.

Thank you for expressing the concern of your agency regarding the proposed Maui Research and Technology Park. Please don't hesitate to contact me should you have any questions regarding our response.

Sincerely yours,



Michael J. Summers
Senior Associate
Chris Hart & Partners, Inc.

cc: Scott Fretz, Hawaii DLNR (DOFAW)
Steve Perkins, Pacific Rim Land

CHARMAINE TAVARES
Mayor

MILTON M. ARAKAWA, A.I.C.P.
Director

MICHAEL M. MIYAMOTO
Deputy Director

Telephone: (808) 270-7845
Fax: (808) 270-7955



COUNTY OF MAUI
DEPARTMENT OF PUBLIC WORKS
200 SOUTH HIGH STREET, ROOM NO. 434
WAILUKU, MAUI, HAWAII 96793

November 4, 2010

RALPH NAGAMINE, L.S., P.E.
Development Services Administration

CARY YAMASHITA, P.E.
Engineering Division

BRIAN HASHIRO, P.E.
Highways Division

RECEIVED

NOV 16 2010

CHRIS HART & PARTNERS, INC.
Landscape Architecture and Planning

CHH Mike
08/132

Mr. Michael Summers, Senior Associate
CHRIS HART & PARTNERS, INC.
115 North Market Street
Wailuku, Maui, Hawaii 96793-1717

Dear Mr. Summers:

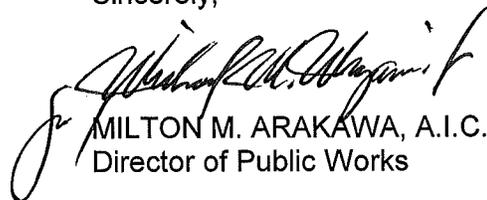
**SUBJECT: EARLY CONSULTATION FOR THE PROPOSED MAUI
RESEARCH AND TECHNOLOGY PARK MASTER PLAN; TMK:
(2) 2-2-024:001-009, 014-017, 031, 034; 2-2-002: 054 (POR.)**

We reviewed your early consultation request and offer the following comments:

1. We would suggest that the master plan provide for fire control needed for vacant property.
2. Although not currently allowed within the Outdoor Lighting Code, we would highly recommend the use of Light Emitting Diodes (LED) street lighting for this project. LED lighting in municipal parking lots have shown a significant reduction (60+%) over the use of high pressure sodium street lights. LED lighting also has an expected ten (10) year life span before requiring replacement, contains no hazardous metals that need to be disposed of and is dark sky compliant.

Please call Michael Miyamoto at 270-7845 if you have any questions regarding this letter.

Sincerely,


MILTON M. ARAKAWA, A.I.C.P.
Director of Public Works

MMA:MMM:ls

xc: Highways Division
Engineering Division

S:\LUCA\I\ZM\prop_maui_research_tech_park_ec_220241_various_ls.wpd



**CHRIS
HART**
& PARTNERS, INC.

Landscape Architecture
City & Regional Planning

November 29, 2011

Mr. David Goode, Director
Department of Public Works
200 S. High St. Rm. 434
Wailuku, HI 96793

Dear Mr. Goode,

RE: Early Consultation Letter for the Proposed Maui Research and Technology Park Master Plan update, located in Kihei, Maui, Hawaii at TMK's: (2) 2-2-024:1-9,14-17,31,34; (2) 2-2-002:054 (por.)

Thank you for your letter of November 4, 2010 indicating that your department recommends providing for fire control on vacant property within the Maui Research and Technology Park. During project construction, measures will be taken to maintain a sufficient fire break along the boundaries of the proposed MRTP expansion. When completed, the MRTP will completely remove all non-native grass, weed, and scrub fuels from an area of approximately 432 acres.

In addition the MRTP is currently serviced by the Kihei Fire Station which is located approximately 1.5 miles from the MRTP. The completed MRTP will have fire hydrants and water pressures as required by law to service the area.

The Applicant is researching energy saving measures for master plan infrastructure such as street lighting and LED lighting will be considered.

Mr. David Goode, Director
MRTP
Response Letter
November 29, 2011
Page 2 of 2

Thank you for your comments. Please feel free to call me or Mr. Brett Davis at (808) 242-1955 should you have any questions.

Respectfully submitted,

A handwritten signature in black ink that reads "Michael J. Summers". The signature is written in a cursive style with a long, sweeping underline.

Michael Summers
Senior Associate • Land Planner

CC. Mr. Steve Perkins, Pacific Rim Land, Inc.
Project File 08-132

CHARMAINE TAVARES
Mayor



JEFFREY K. ENG
Director

**DEPARTMENT OF WATER SUPPLY
COUNTY OF MAUI**

200 SOUTH HIGH STREET
WAILUKU, MAUI, HAWAII 96793-2155
www.mauiwater.org

November 23, 2010

Mr. Michael Summers
Chris Hart and Partners
115 North Market Street
Wailuku, HI 96793

Re: Maui Research and Technology Park Master Plan Update EIS Early Consultation
TMKs: (2) 2-2-024:1-9, 14-17, 31, 34; (2) 2-2-002:054 (por.)

Dear Mr. Summers:

Thank you for consulting with the Department of Water Supply (DWS) in the preparation of this Maui Research and Technology Park Master Plan Update EIS Early Consultation.

Source Availability and Consumption

The project area is served by the Central Maui System. Sources for this system are the Iao, Waihee and Kahului aquifers, Iao Tunnel and the Iao-Waikapu Ditch. Proposed source development projects include Waikapu South Well and the proposed Iao Surface Water Treatment Facility upgrade. The EA/EIS should identify sources and expected potable and non-potable demand. Based on system per-acre standards, the completed project's demand for 2,800,000 square feet of commercial space and 1,250 residential units would be 1,115,591 gpd. The project parcels are served by the following DWS system meters:

TMK (2) 2-2-024:001: one 1 ½-inch meter
TMK (2) 2-2-024:002: one 1 ½-inch meter and one ¾-inch meter
TMK (2) 2-2-024:004: one 1 ½-inch meter
TMK (2) 2-2-024:005: one 1-inch meter
TMK (2) 2-2-024:006: one 1 ½-inch meter
TMK (2) 2-2-024:007: one 2-inch meter
TMK (2) 2-2-024:008: one 1 ½-inch meter and two 2-inch meters
TMK (2) 2-2-024:015: one 1-inch meter

Subdivision of the project site would be subject to the County's availability policy, codified in Title 14 of the Maui County Code. The Department may delay issuance of meters until new sources are on line. The Department will not issue temporary construction meters for Central Maui projects.

"By Water All Things Find Life"

Because portions of the proposed project are within 100 feet of the county reclaimed water line, the project will be required to utilize reclaimed water for potential uses such as landscape irrigation and dust control during construction.

System Infrastructure

The project site is served by 16-inch and 12-inch lines that run along Lipoa Parkway. Twelve fire hydrants serve the project along Holopono and Nihau Streets and Lipoa Parkway. Required fire flow will be determined in the subdivision process.

A “Construction of a Storage Tank” agreement between the County of Maui Department of Water Supply and Maui R&T Partners dated January 21, 1992, has been superseded by a new agreement dated May 23, 2009. The new agreement states that a new tank must be constructed by May 23, 2020. The nearest tank (Piilani) does not feed the project due to insufficient elevation for fire and water service. The project is fed by a pressure regulating valve straight off the transmission main. DWS approved on site backflow preventors, tested by certified backflow preventor assembly testers, will be required as well.

Pollution Prevention

The project overlies the Kamaole aquifer. DWS strives to protect water resources by encouraging adoption of Best Management Practices (BMPs) designed to minimize infiltration and runoff. In addition to BMPs required by state and county rules and regulations and those previously mentioned, we recommend that the following mitigation measures be incorporated in the EIS and implemented.

1. Prevent cement products, oil, fuel and other toxic substances from falling or leaching into the water.
2. Properly and promptly dispose of all loosened and excavated soil and debris material from drainage structure work.
3. Retain ground cover until the last possible date.
4. Stabilize denuded areas by sodding or planting as soon as possible. Replanting should include soil amendments and temporary irrigation. Use high seeding rates to ensure rapid stand establishment.
5. Avoid fertilizers and biocides, or apply only during periods of low rainfall to minimize chemical run-off.
6. Keep run-off on site.

Conservation

Please see Attachment 1: *A Checklist of Water Conservation Ideas for Commercial Buildings* for potentially applicable conservation BMPs. We also recommend that the following conservation measures be incorporated in the EIS and implemented.

Use Non-potable Water: Reclaimed water is readily available from the Kihei Sewage Treatment Plant, or alternatively, brackish water could be used for dust control during construction. The subject parcels have a centrally located reclaimed water line that should be extended and utilized for irrigation. The applicant should install infrastructure necessary to utilize a future connection to the reclaimed water line.

Use Climate-adapted Plants: The project is located in the “Maui County Planting Plan” - Plant Zone 3 (see Attachment 2). Native plants adapted to the area conserve water and protect the watershed from degradation due to invasive alien species. Use native plants for all landscaping purposes to the extent feasible.

Michael Summers

Maui Research and Technology Park Master Plan Update EIS Early Consultation

Page 3

Prevent Over-Watering By Automated Systems: Provide rain-sensors on all automated irrigation controllers in common areas. Check and reset controllers at least once a month to reflect the monthly changes in evapo-transpiration rates at the site. As an alternative, provide the more automated soil-moisture sensors on controllers.

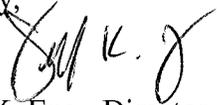
Eliminate Single-Pass Cooling: Single-pass, water-cooled systems should be eliminated per Maui County Code Subsection 14.21.20. Although prohibited by code, single-pass water cooling is still manufactured into some models of air conditioners, freezers, and commercial refrigerators.

Utilize Low-Flow Fixtures and Devices: Maui County Code Subsection 16.20A.680 requires the use of low-flow water fixtures and devices in faucets, showerheads, urinals, water closets, and hose bibs. Water conserving washing machines, ice-makers and other units are also available.

Maintain Fixtures to Prevent Leaks: A simple, regular program of repair and maintenance can prevent the loss of hundreds or even thousands of gallons of water a day.

Should you have any questions regarding system improvements for this project, please contact our engineering division at (808) 270-7835. For questions on water resources, please contact our Water Resources and Planning Division at (808) 244-8550.

Sincerely,



Jeffrey K. Eng, Director

bab

c: engineering division

Attachments:

1. *A Checklist of Water Conservation Ideas for Commercial Buildings*
2. County of Maui Department of Water Supply, *Saving Water in the Yard: What and How to Plant in Your Area*



**CHRIS
HART**
& PARTNERS, INC.

Landscape Architecture
City & Regional Planning

November 30, 2011

Mr. Dave Taylor, Director
Department of Water Supply
200 S. High St.
Wailuku, HI 96793-2155

Dear Mr. Taylor,

RE: Early Consultation Letter for the Proposed Maui Research and Technology Park Master Plan update, located in Kihei, Maui, Hawaii at TMK's: (2) 2-2-024:1-9,14-17,31,34; (2) 2-2-002:054 (por.)

Thank you for your letter dated November 23, 2010. In responses to your letter we offer the following comments:

Source Availability and Consumption

The forthcoming EIS document will identify sources and expected potable and non-potable demand. The Applicant is aware of the requirement to use reclaimed water for uses such as landscaping.

System Infrastructure

The applicant acknowledges that required fire flow calculations will be determined during the subdivision process. The MRTP project team has met Department of Water Supply (DWS) Deputy Director Mr. Paul Meyer and understands that a resolution is required and the MRTP will continue to coordinate with the DWS on the storage tank agreement referenced in your letter. The Applicant acknowledges that DWS approved on site backflow

Mr. Dave Taylor, Director
Department of Water Supply
Response Letter
November 30, 2011
Page 2 of 2

preventors, tested by certified backflow preventor assembly testers, will be required as well.

Pollution Prevention

The proposed project will incorporate Best Management Practices to minimize infiltration and runoff. The Applicant has reviewed your recommendations and will address them in the forthcoming EIS document.

Conservation

We have reviewed the attached checklist of water conservation ideas for commercial buildings and will incorporate energy and water conservation measures throughout the proposed project. Conservation measures will be included in the EIS.

Thank you again and please feel free to call me or Mr. Brett Davis at (808) 242-1955 should you have any questions.

Sincerely yours,



Michael Summers
Senior Associate • Land Planner

CC. Mr. Steve Perkins, Pacific Rim Land, Inc.
Project File 08-132



United States Department of the Interior

FISH AND WILDLIFE SERVICE
Pacific Islands Fish and Wildlife Office
300 Ala Moana Boulevard, Room 3-122, Box 50088
Honolulu, Hawaii 96850



RECEIVED

JUN 10 2011

In Reply Refer To:
2011-TA-0325

CHRIS HART & PARTNERS, INC
Landscape Architecture and Planning

JUN 07 2011

cc: Mike Brett

08/132

Mr. Michael Summers
Chris Hart & Partners, Inc.
115 North Market Street
Wailuku, Hawaii 96793

Subject: Technical Assistance for the Proposed Maui Research and Technology Park Project, Maui

Dear Mr. Summers:

The U.S. Fish and Wildlife Service (Service) is in receipt of your letter, dated April 27, 2011, in which you informed us of new survey information and additional project details for the Maui Research and Technology Park Project in Kihei, Maui. We previously provided comments on the Environmental Impact Statement (EIS) preparation notice in a letter dated October 28, 2010 (Service File 2010-TA-0527). The proposed action entails the construction of a mix of housing, office, civic, live-work, park, and retail facilities on 58 acres of the project site, development of a "Village Center" flanked by 100 acres of residential development. The project area is located immediately downslope from one of the most intact examples of native dryland forests remaining in Hawaii.

Based on the information and comments we provided, you requested additional surveys to determine whether any federally listed species occur at the project site. The additional surveys resulted in an additional nine plant species, none of which are native to Hawaii. While one species, *Ipomoes obscura*, may be a host to adult Blackburn's sphinx moth (*Manduca blackburni*; BSM), no other larval or adult host plants were identified. We understand the effort of conducting additional surveys, and appreciate your response to our previous comments. We also acknowledge the numerous conservation and avoidance measures that you have incorporated into the project description regarding impacts to seabirds, waterbirds, and the spread of invasive species. We offer the following guidance to assist you in refining your assessment of project impacts to federally listed species and native habitats.

Hawaiian hoary bat

Our previous comments advised you to avoid cutting vegetation greater than 15 feet tall during the bat pupping season (May 15 through August 15) to avoid impacts to dependent, non-volant bat pups. Your letter states that you plan to avoid cutting trees between July 1 and August 15,

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IN AMERICA 

and that these dates are consistent with guidance from U.S. Geological Survey researcher Dr. Frank Bonnacorso. Dr. Bonnacorso has provided valuable insight on the life history and breeding habits of the Hawaiian hoary bat, however, we base species guidance on *all* available data.

After review of all raw data associated with Hawaiian hoary bats, we have altered our recommended avoidance dates to June 1 through September 15. This change reflects data collected by F. Bonnacorso (published and unpublished work), Theresa Menard (2001), and Tomich (data used in Menard's 2001 document). If it is determined that the proposed project cannot avoid trimming or cutting vegetation during this sensitive time period, we recommend that additional surveys be conducted to determine whether the site is occupied by bats. Please contact this office for our standardized bat survey protocol guidance document.

Blackburn's Sphinx Moth

Surveys conducted by Hobdy in 2008 and SWCA in 2011 did not find the project site to be occupied by the BSM. Additionally, no plant hosts for larval-phase BSM were found. While one plant found on site is known to be a host for adult BSM, it is described as "rare." We appreciate the additional surveys to search for BSM; however, given the proximity of occupied BSM critical habitat and the propensity for tree tobacco to grow in recently disturbed areas, we recommend that more comprehensive surveys be conducted prior to being cleared.

Minimize Wildfire Impacts

Our previous letter encouraged you to develop methods to avoid and minimize the impacts of wildfire on sensitive habitats and ecosystems upslope. The native forest and other nearby natural resources on the leeward slopes of Haleakala would be severely impacted by a wildfire. Your response to our letter indicates that non-native vegetation on the project site will be cleared to reduce the risk of fire, and that grazed ranches adjoining the property will act as de-facto fire breaks.

Despite these avoidance measures, we remain concerned that the proposed project will increase the risk of wildfire, which would significantly affect resources outside of the project footprint. We recommend you incorporate further measures to reduce the impacts of wildfire, as described in our previous letter. If your minimization methods rely on private landowners grazing their property, we suggest you develop a contractual agreement with them to address wildfire concerns.

If, in the course of your National Environmental Policy Act (NEPA) analysis, you find that the proposed project may directly or indirectly impact federally listed species, Maui Research Partners, LLC., should apply for an incidental take permit under section 10(a)(1)(A) of the Endangered Species Act of 1973 (ESA), as amended. A section 10 permit application must include a habitat conservation plan that identifies the effects of the action on listed species and their habitats, and defines measures to minimize and mitigate those adverse effects.

We hope this information assists you in developing a comprehensive and thorough Draft EIS. When the draft EIS is complete, we request a hard copy of the document. We appreciate your efforts to conserve endangered species and native ecosystems. If you have questions regarding

Mr. Michael Summers

3

these comments, please contact Michelle Bogardus, Consultation and Habitat Conservation Planning Program Biologist (phone: 808-792-9473; fax: 808-792-9581).

Sincerely,

A handwritten signature in black ink, appearing to read 'Loyal Mehrhoff', written in a cursive style.

for Loyal Mehrhoff
Field Supervisor

cc: Scott Fretz, Hawaii Department of Land and Natural Resources, Division of Forestry and Wildlife, Honolulu



Landscape Architecture
City & Regional Planning

October 25, 2011

Loyal Mehrhoff, Field Supervisor
Pacific Islands Fish and Wildlife Office
Fish and Wildlife Service
US Department of the Interior
300 Ala Moana Boulevard, Room 3-122, Box 50088
Honolulu, Hawaii 96850

Subject: 2011-TA-0325, FWS Letter of June 7, 2011, Technical Assistance for the
Environmental Impact Statement Preparation Notice for the Proposed Maui Research
and Technology Park Master Plan Update, Maui

Dear Dr. Mehrhoff,

Thank you for your letter of June 7, 2011, in which you provided additional suggestions for ways to minimize potential impacts that may be associated with the proposed Maui Research and Technology Park. We offer the following response to your specific recommendations.

Hawaiian hoary bat

In light of the new information you provided regarding the pupping season for endangered Hawaiian hoary bats, we will refrain from removing or trimming woody plants greater than 15 feet tall between June 1 and September 15 throughout the development and operation of the proposed project.

Blackburn's sphinx moth

Another comprehensive survey for endangered Blackburn's sphinx moth host plants will be conducted just prior to land clearing to ensure that the species and its habitat will not be affected by the proposed project.

Minimize Wildfire Impacts

In addition to the measures described in our April 27, 2011, letter to you, we will expand our efforts to minimize the risk of wildfires which might originate within the Maui Research and

Mr. Loyal Mehrhoff, Field Supervisor
Maui R&T Park
Response Letter
October 25, 2011
Page 2 of 2

Technology Park. These efforts may include agreements with neighboring land owners. We will continue to keep your office abreast of our wildfire prevention and response measures throughout the planning process for the proposed project, and appreciate your offer of technical assistance in this matter.

Other Measures

We will continue to adhere to the additional mitigation measures we identified in our April 27, 2011 letter to you including those regarding shading for lights on the property to minimize fallout of seabirds; measures to minimize the spread of invasive species; and pest control.

Should we determine during the course of our participation in preparation of the Environmental Impact Statement (EIS) that the proposed project will directly or indirectly impact a listed endangered species, we will apply for an incidental take permit (ITP) under section 10(a)(1)(A) of the Endangered Species Act of 1973 (ESA), as amended.

Sincerely yours,

A handwritten signature in cursive script that reads "Michael J. Summers".

Michael Summers
Senior Associate

cc: Scott Fretz, Hawaii DLNR (DOFAW)



TABLE 28
DEIS Comment & Response Letters

RECEIVED

JUL 09 2012

CHRIS HART & PARTNERS, INC.
Landscape Architecture and Planning

CC: Brett 08/132

Hawaiian Telcom ●

Network Engineering and Planning
OSP Engineering - Maui
60 South Church St.
Wailuku, HI 96793
Phone 808 242-5102
Fax 808 242-8899

July 5, 2012

Chris Hart & Partners, Inc.
115 N. Market Street
Wailuku, HI 96793

Attention: Brett Davis

Subject: Maui Research and Technology Park
Master Plan Update

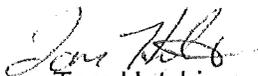
Dear Brett,

Thank you for allowing us to review and comment on the subject project. Your plans have been received and put on file.

Hawaiian Telcom, Inc. has no comment, nor do we require any additional information at this time.

Should you require further assistance, please call me at 242-5107.

Sincerely,


Tom Hutchison
OSP Engineer

cc: Steve Perkins, Maui R & T Partners, LLC
Gerry Sagucio, Section Manager

BICS File No. 1006-018 (3035)



**CHRIS
HART**
& PARTNERS, INC.

Landscape Architecture
City & Regional Planning

July 17, 2012

Mr. Tom Hutchinson, OSP Engineer
Hawaiian Telcom
60 South Church St.
Wailuku, HI 96793

Dear Mr. Hutchinson,

RE: Comments on the Draft Environmental Impact Statement for the Proposed Maui Research and Technology Park Master Plan update, located in Kihei, Maui, Hawaii at TMK's: (2) 2-2-024:1-9,14-18,31,32, 34, 36-46 and (2) 2-2-002:054 (por.)

Thank you for your letter of July 5, 2012 indicating that Hawaiian Telcom has no comments on the proposed project.

Thank you again for providing us with your response. Please feel free to call me or Mr. Brett Davis at (808) 242-1955 should you have any questions.

Sincerely yours,

Christopher L. Hart, President
Landscape Architect • Planner

CC. Mr. Steve Perkins, Pacific Rim Land, Inc.
Project File 08-132

NEIL ABERCROMBIE
GOVERNOR



DEAN H. SEKI
COMPTROLLER

STATE OF HAWAII
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
P.O. BOX 119, HONOLULU, HAWAII 96810-0119

(P)1146.2

JUL - 5 2012

RECEIVED

JUL 05 2012

CHRIS HART & PARTNERS, INC.
Landscape Architecture and Planning

cc: Maui 08/132

Mr. Christopher L. Hart, President
Chris Hart & Partners, Inc.
115 North Market Street
Wailuku, Hawaii 96793

Dear Mr. Hart:

Subject: Maui Research and Technology Park Master Plan

Thank you for the opportunity to provide comments for the subject project. This project does not impact any of the Department of Accounting and General Services' projects or existing facilities in the general area, and we have no comments to offer at this time.

If you have any questions, please call me at 586-0400 or have your staff call Mr. Alva Nakamura of the Public Works Division at 586-0488.

Sincerely,

A handwritten signature in black ink, appearing to read "D. Seki", with a long horizontal line extending to the right.

DEAN H. SEKI
State Comptroller

c. Maui R & T Partners, LLC



**CHRIS
HART**
& PARTNERS, INC.

Landscape Architecture
City & Regional Planning

July 17, 2012

Mr. Dean H. Seki, State Comptroller
State of Hawaii
Department of Accounting and General Services
P.O. Box 119
Honolulu, HI 96810-0119

Dear Mr. Seki,

RE: Comments on the Draft Environmental Impact Statement for the Proposed Maui Research and Technology Park Master Plan update, located in Kihei, Maui, Hawaii at TMK's: (2) 2-2-024:1-9,14-18,31,32, 34, 36-46 and (2) 2-2-002:054 (por.)

Thank you for your letter of July 5, 2012 indicating that the Department of Accounting and General Services has no comments on the proposed project.

Thank you again for providing us with your response. Please feel free to call me or Mr. Brett Davis at (808) 242-1955 should you have any questions.

Sincerely yours,

Christopher L. Hart, President
Landscape Architect • Planner

CC. Mr. Steve Perkins, Pacific Rim Land, Inc.
Project File 08-132



United States Department of the Interior

U.S. GEOLOGICAL SURVEY
Pacific Islands Water Science Center
677 Ala Moana Blvd., Suite 415
Honolulu, Hawaii 96813
Phone: (808) 587-2400/Fax: (808) 587-2401

July 5, 2012

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JUL 06 2012

CHRIS HART & PARTNERS, INC.
Landscape Architecture and Planning

Mr. Steve Perkins, Project Manager
Maui R&T Partners, LLC
1300 North Holopono, Suite 201
Kihei, Hawaii 96753

CC: Draft

Dear Mr. Perkins:

Subject: Draft Environmental Impact Statement (DEIS), Maui Research and Technology Park Master Plan Update, Island of Maui, Makawao District, (2) 2-2-24:01-07; (2) 2-2-24:08; (2) 2-2-24:09; (2) 2-2-24:14-18; (2) 2-2-24:31; (2) 2-2-24:32; (2) 2-2-024:34; (2) 2-2-24:36-46; & (2) 2-2-002:054 (portion)

Thank you for forwarding the subject DEIS for review and comment by the staff of the U.S. Geological Survey Pacific Islands Water Science Center. We regret however, that due to prior commitments and lack of available staff time, we are unable to review this document.

We appreciate the opportunity to participate in the review process.

Sincerely,

Stephen S. Anthony
Center Director

cc: Chris Hart & Partners, Inc., 115 North Market Street, Wailuku, Hawaii 96793



Landscape Architecture
City & Regional Planning

July 17, 2012

Mr. Stephen S. Anthony, Center Director
United States Department of the Interior
U.S. Geological Survey
Pacific Islands Water Science Center
677 Ala Moana Blvd., Suite 415
Honolulu, HI 96813

Dear Mr. Anthony,

RE: Comments on the Draft Environmental Impact Statement for the Proposed Maui Research and Technology Park Master Plan update, located in Kihei, Maui, Hawaii at TMK's: (2) 2-2-024:1-9,14-18,31,32, 34, 36-46 and (2) 2-2-002:054 (por.)

Thank you for your letter of July 5, 2012 indicating that the U.S. Geological Survey Pacific Islands Water Science Center is unable to review the proposed project.

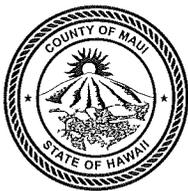
Thank you again for providing us with your response. Please feel free to call me or Mr. Brett Davis at (808) 242-1955 should you have any questions.

Sincerely yours,

Christopher L. Hart, President
Landscape Architect • Planner

CC. Mr. Steve Perkins, Pacific Rim Land, Inc.
Project File 08-132

ALAN M. ARAKAWA
MAYOR



JEFFREY A. MURRAY
CHIEF

ROBERT M. SHIMADA
DEPUTY CHIEF

COUNTY OF MAUI
DEPARTMENT OF FIRE AND PUBLIC SAFETY
FIRE PREVENTION BUREAU

313 MANEA PLACE • WAILUKU, HAWAII 96793
(808) 244-9161 • FAX (808) 244-1363

RECEIVED

JUL 06 2012

CHRIS HART & PARTNERS, INC.
Landscape Architecture and Planning

cc Brett

Date : July 3, 2012

To : Chris Hart & Partners
C/O Brett Davis
115 North Market Street
Wailuku, HI 96793

Subject : Maui Research and Technology Park Master Plan

TMK: (2) 2-2-024:001-007; (2) 2-2-024:008; (2) 2-2-024:009;
(2) 2-2-024:014-018; (2) 2-2-024:031; (2) 2-2-024:032;
(2) 2-2-024:034; (2) 2-2-024:036-046; (2) 2-2-002:054

Dear Brett,

Thank you for allowing our department to comment on this EIS, CIZ, & CPA. The change in zone will require you to follow the "Business-Commercial" requirements, as apposed to the current "Agricultural" requirements. Below are the two in detail, for your information:

Agriculture:

Water supply for fire protection shall have a minimum flow of 500 gallons per minute for a two hour duration. Fire hydrants shall be placed on the service road to all parcels with hydrant spacing a maximum of 500 feet between hydrants.

Service roads to proposed properties shall have a clear width of 20 feet. Any dead-end roads or cul-de-sacs shall have a clear width of 32 ft., and if greater than 150 ft. in length, shall be provided with an approved fire apparatus turn-around. All turns and required turnarounds shall have an outside turning radius of 35 feet. The maximum grade for the service roads shall not be greater than 18%.

Once construction of buildings are planned, there shall be at least one hydrant within 500 feet of any building to be constructed.

Business-Commercial:

Water supply for fire protection shall have a minimum flow of 2000 gallons per minute for a two hour duration with hydrant spacing a maximum of 250 feet between hydrants. Dead-ends shall have a hydrant within 125 ft.

Service roads to proposed properties shall have a clear width of 20 feet. Any dead-end roads or cul-de-sacs shall have a clear width of 32 ft., and if greater than 150 ft. in length, shall be provided with an approved fire apparatus turn-around. All turns and required turnarounds shall have an outside turning radius of 35 feet. The maximum grade for the service roads shall not be greater than 12%.

Once construction of buildings are planned, there shall be at least one hydrant within 300 feet of any building to be constructed.

If you have any questions, please call 808-244-9161 ext 25 or fax 808-244-1363.

Sincerely,


Lt. K. Davis



**CHRIS
HART**
& PARTNERS, INC.

Landscape Architecture
City & Regional Planning

August 30, 2012

Lieutenant Peter "Kono" Davis, Fire Plans Examiner
County of Maui, Department of Fire and Public Safety
313 Manea Street
Wailuku, HI 96793

Dear Lieutenant Davis,

RE: Comments on the Draft Environmental Impact Statement for the Proposed Maui Research and Technology Park (MRTP) Master Plan Update, located in Kihei, Maui, Hawaii at TMK's: (2) 2-2-024:1-9,14-18,31,32, 34, 36-46 and (2) 2-2-002:054 (por.)

Thank you for your letter of July 3, 2012 identifying that the Applicant is required to develop the MRTP project in accordance with "Urban" property to follow the "Business-Commercial" requirements of the Fire Prevention Bureau. In addition the Applicant will continue to coordinate with your office on street design during the CIZ, subdivision and building permit processes.

Thank you again, for providing us with your response. Please feel free to call myself or Mr. Brett Davis at (808) 242-1955 should you have any questions.

Sincerely yours,

Christopher L. Hart, ASLA
President
Landscape Architect • Planner

CC. Mr. Steve Perkins, Pacific Rim Land, Inc.
Project File 08-132

NEIL ABERCROMBIE
GOVERNOR OF HAWAII



LORETTA J. FUDDY, A.C.S.W., M.P.H.
DIRECTOR OF HEALTH

STATE OF HAWAII
DEPARTMENT OF HEALTH
P. O. BOX 3378
HONOLULU, HI 96801-3378

In reply, please refer to:
File:

12-121
EIS Maui R-T Park

July 6, 2012

Maui R&T Partners, LLC
1300 North Holocono, Suite 201
Kihei, Hawaii 96753

Dear Sir/Madam:

**SUBJECT: Draft Environmental Impact Statement
Maui Research and Technology Park Master Plan Update**

The Department of Health (DOH), Environmental Planning Office (EPO), acknowledges receipt of your letter, dated **June 28, 2012**. Thank you for allowing us to review and comment on the subject document. The document was routed to the various branches of the Environmental Health Administration. We have no comments at this time, but reserve the right to future comments. We strongly recommend that you review all of the Standard Comments on our website: www.hawaii.gov/health/environmental/env-planning/landuse/landuse.html. Any comments specifically applicable to this application should be adhered to.

The United States Environmental Protection Agency (EPA) provides a wealth of information on their website including strategies to help protect our natural environment and build sustainable communities at: <http://water.epa.gov/infrastructure/sustain/>. The DOH encourages State and county planning departments, developers, planners, engineers and other interested parties to apply these strategies and environment principles whenever they plan or review new developments or redevelopments projects. We also ask you to share this information with others to increase community awareness on healthy, sustainable community design. If there are any questions about these comments please contact me.

Sincerely,

A handwritten signature in cursive script, appearing to read "Laura Leialoha Phillips McIntyre".

Laura Leialoha Phillips McIntyre, AICP
Environmental Planning Office Manager
Environmental Health Administration
Department of Health
919 Ala Moana Blvd., Ste. 312
Honolulu, Hawaii 96814
Phone: 586-4337
Fax: 586-4370
laura.mcintyre@doh.hawaii.gov

c: ✓ Chris Hart & Partners, Inc.

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JUL 11 2012

CHRIS HART & PARTNERS, INC.
Landscape Architecture and Planning

CC: Brett
08/13/12



Landscape Architecture
City & Regional Planning

June 17, 2012

Ms. Laura Leialoha Phillips McIntyre, AICP
Environmental Planning Office Manager
State of Hawaii, Dept. of Health
Environmental Health Administration
P.O. Box 3378
Honolulu, HI 96801-3378

Dear Ms. Leialoha Phillips McIntyre,

RE: Comments on the Draft Environmental Impact Statement for the Proposed Maui Research and Technology Park Master Plan update, located in Kihei, Maui, Hawaii at TMK's: (2) 2-2-024:1-9,14-18,31,32, 34, 36-46 and (2) 2-2-002:054 (por.)

Thank you for your letter of July 6, 2012. The Applicant has reviewed the standard comments online and will review the EPA website for strategies to help protect the natural environment and build sustainable communities.

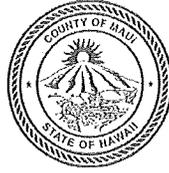
Thank you again for providing us with your comments. Please feel free to call me or Mr. Brett Davis of our office at (808) 242-1955 should you have any questions.

Sincerely yours,

Christopher L. Hart, President
Landscape Architect • Planner

CC. Mr. Steve Perkins, Pacific Rim Land, Inc.
Project File 08-132

ALAN M. ARAKAWA
Mayor



JO ANNE JOHNSON-WINER
Director
MARC I. TAKAMORI
Deputy Director
Telephone (808) 270-7511

DEPARTMENT OF TRANSPORTATION

COUNTY OF MAUI
200 South High Street
Wailuku, Hawaii, USA 96793-2155

July 11, 2012

Mr. Brett Davis
Chris Hart & Partners Inc.
115 N Market Street
Wailuku, Maui, Hawaii 96793

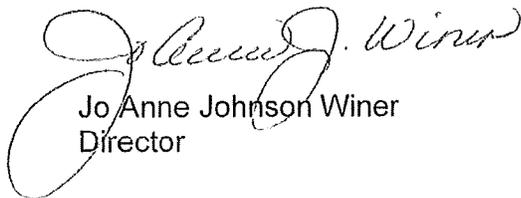
Subject: EIS Proposed Maui Research and Technology Park Master Plan

Dear Mr. Davis,

Thank you for the opportunity to comment on this project. We have no comments to make at this time.

Please feel free to contact me if you have any questions.

Sincerely,


Jo Anne Johnson Winer
Director

RECEIVED

JUL 16 2012

CHRIS HART & PARTNERS, INC.
Landscape Architecture and Planning

CC: Brett 08/13/2



**CHRIS
HART**
& PARTNERS, INC.

Landscape Architecture
City & Regional Planning

July 17, 2012

Mrs. JoAnne Johnson Winer, Director
County of Maui, Department of Transportation
200 South High Street
Wailuku, HI 96793-2155

Dear Mrs. Johnson Winer,

RE: Comments on the Draft Environmental Impact Statement for the Proposed Maui Research and Technology Park Master Plan update, located in Kihei, Maui, Hawaii at TMK's: (2) 2-2-024:1-9,14-18,31,32, 34, 36-46 and (2) 2-2-002:054 (por.)

Thank you for your letter of July 11, 2012 indicating that the Department of Transportation has no comments on the proposed project at this time.

Thank you again for providing us with your response. Please feel free to call me or Mr. Brett Davis at (808) 242-1955 should you have any questions.

Sincerely yours,

Christopher L. Hart, President
Landscape Architect • Planner

CC. Mr. Steve Perkins, Pacific Rim Land, Inc.
Project File 08-132



DEPARTMENT OF
HOUSING AND HUMAN CONCERNS
HOUSING DIVISION
COUNTY OF MAUI

ALAN M. ARAKAWA
Mayor
JO-ANN T. RIDAO
Director
JAN SHISHIDO
Deputy Director

35 LUNALILO STREET, SUITE 102 • WAILUKU, HAWAII 96793 • PHONE (808) 270-7351 • FAX (808) 270-6284

July 12, 2012

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JUL 17 2012

Mr. Steve Perkins
Project Manager
Maui R & T Partners, LLC
1300 North Holopono, Suite 201
Kihei, Hawaii 96753

CHRIS HART & PARTNERS, INC.
Landscape Architecture and Planning
CC: B2014 081132

Dear Mr. Perkins:

Subject: Draft Environmental Impact Statement (DEIS) for Maui R & T Master Plan Update Consolidated Applications for a CIZ, CPA and Environmental Impact Statement located in Kihei, Maui, Hawaii 96753. TMK: (2) 2-2-24:01-07; (2) 2-2-24:08; (2) 2-2-24:09; (2) 2-2-24:14-18; (2) 2-2-24:31; (2) 2-2-24:32; (2) 2-2-24:34; (2) 2-2-24:36-46; & (2) 2-2-002:054 (portion)

The Housing Department has reviewed the Draft Environmental Impact Statement of the above subject project. Based on our review, we have determined that the subject project requires a Residential Work Force Housing agreement under Chapter 2.96, Maui County Code.

The consolidated application proposes the following:

1. 750 single family units
2. 500 multi-family units
3. 150 hotel rooms
4. reducing lot sizes thereby creating new lots

Please call Mr. Veranio Tongson Jr. of our Housing Division at 270-1741 if you have any questions.

Sincerely,

Wayde T. Oshiro
WAYDE T. OSHIRO
Housing Administrator

cc: Director of Housing and Human Concerns
State of Hawaii Land Use Commission
Chris Hart and Partners, Inc ✓



Landscape Architecture
City & Regional Planning

August 17, 2012

Mr. Wayde T. Oshiro, Housing Administrator
County of Maui, Department of Housing and Human Concerns
35 Lunalilo St. Suite 102
Wailuku, HI 96793

Dear Mr. Oshiro,

RE: Comments on the Draft Environmental Impact Statement for the Proposed Maui Research and Technology Park Master Plan update, located in Kihei, Maui, Hawaii at TMK's: (2) 2-2-024:1-9,14-18,31,32, 34, 36-46 and (2) 2-2-002:054 (por.)

Thank you for your letter of July 12, 2012. The Applicant will continue to coordinate with the Department and at a future date will enter into a Residential Workforce Housing Agreement pursuant to Chapter 2.96, Maui County Code.

Thank you again for providing us with your response. Please feel free to call myself or Mr. Brett Davis at (808) 242-1955 should you have any questions.

Sincerely yours,

Christopher L. Hart, ASLA
President
Landscape Architect • Planner

CC. Mr. Steve Perkins, Pacific Rim Land, Inc.
Project File 08-132

NEIL ABERCROMBIE
GOVERNOR OF HAWAII



LORETTA J. FUDDY, A.C.S.W., M.P.H.
DIRECTOR OF HEALTH

STATE OF HAWAII
DEPARTMENT OF HEALTH
P. O. BOX 3378
HONOLULU, HI 96801-3378

In reply, please refer to:
File:

LUD-2 2 2 024 001-ID1023
Draft EIS Maui Research & Tech Park

July 13, 2012

Mr. Christopher Hart
Chris Hart & Partners, Inc.
115 North Market Street
Wailuku, Hawaii 96793-1717

Dear Mr. Hart:

Subject: Draft Environmental Impact Statement
Maui Research and Technology Park Master Plan - Update
550 Lipoa Street, Kihei, Maui, Hawaii 96753
TMK (2) 2-2-024: 001 – 007, 008, 009, 014 – 018, 031, 032, 034, 036 – 046
TMK (2) 2-2-002: 054 (portion)

Thank you for allowing us the opportunity to review and provide comments for the Draft Environmental Impact State for the subject project.

It is our understanding that the project will be served by the County of Maui's Kihei Reclamation Wastewater Reclamation Facility; therefore, we have no comments to offer at this time. We encourage the developer to work with the County and utilize recycled water for irrigation and other non-potable water purposes such as dust control, open spaces or landscaping areas.

All wastewater plans must conform to applicable provisions of the Department of Health's Administrative Rules, Chapter 11-62, "Wastewater Systems." Should you have any questions, please contact the Planning & Design Section of the Wastewater Branch at our Maui office at 984-8232 or Oahu office at (808) 586-4294 or fax to (808) 586-4300.

Sincerely,

SINA PRUDER, P.E., ACTING CHIEF
Wastewater Branch

LM:cle

c: DOH-Environmental Planning Office
DOH-WWB's Maui Staff, Mr. Roland Tejano

CC: Draft 08/132
RECEIVED
JUL 17 2012

CHRIS HART & PARTNERS, INC.
Landscape Architecture and Planning



Landscape Architecture
City & Regional Planning

August 17, 2012

Ms. Sina Pruder, P.E., Acting Chief
State of Hawaii, Dept. of Health
Wastewater Branch
P.O. Box 3378
Honolulu, HI 96801-3378

Dear Ms. Pruder,

RE: Comments on the Draft Environmental Impact Statement for the Proposed Maui Research and Technology Park Master Plan update, located in Kihei, Maui, Hawaii at TMK's: (2) 2-2-024:1-9,14-18,31,32, 34, 36-46 and (2) 2-2-002:054 (por.)

Thank you for your letter of July 13, 2012, indicating that the Department has no comments at this time. Please be assured that the Developer will work with the County to utilize recycled water for irrigation and other non-potable uses such as dust-control during the construction phase. Wastewater plans will conform to applicable provisions of the Department of Health's Administrative Rules, Chapter 11-62, "Wastewater Systems".

Thank you again for providing us with your comments. Please feel free to call myself or Mr. Brett Davis of our office at (808) 242-1955 should you have any questions.

Sincerely yours,

Christopher L. Hart, ASLA

President

Landscape Architect • Planner

CC. Mr. Steve Perkins, Pacific Rim Land, Inc.
Project File 08-132



STATE OF HAWAII
DEPARTMENT OF HEALTH
MAUI DISTRICT HEALTH OFFICE
54 HIGH STREET
WAILUKU, HAWAII 96793

July 13, 2012

Mr. Steve Perkins
Project Manager
Maui R & T Partners, LLC
1300 North Holopono, Suite 201
Kihei, Hawai'i 96753

Dear Mr. Perkins:

**Subject: Draft Environmental Impact Statement
Maui Research & Technology Park Master Plan Update
TMK: (2) 2-2-24:01-07; 2-2-24:08; 2-2-24:09;
2-2-24:14-18; 2-2-24:31; 2-2-24:32; 2-2-024:34;
2-2-24:36-46; and 2-2-002:054 (Por.)**

Thank you for the opportunity to review this project. We have no comments to offer.

It is strongly recommended that the Standard Comments found at the Department's website: <http://hawaii.gov/health/environmental/env-planning/landuse/landuse.html> be reviewed, and any comments specifically applicable to this project should be adhered to.

Should you have any questions, please call me at 808 984-8230 or E-mail me at patricia.kitkowski@doh.hawaii.gov.

Sincerely,

A handwritten signature in cursive script that reads "Patti Kitkowski".

Patti Kitkowski
District Environmental Health Program Chief

c Brett Davis, Chris Hart & Partners, Inc.
EPO

CC: Brett 08/13/12

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JUL 16 2012



**CHRIS
HART**
& PARTNERS, INC.

Landscape Architecture
City & Regional Planning

July 17, 2012

Ms. Patti Kitkowski
Acting District Environmental Health Program Chief
Dept. of Health
Maui District Health Office
54. High St.
Wailuku, HI 96793-2102

Dear Ms. Kitkowski,

RE: Comments on the Draft Environmental Impact Statement for the Proposed Maui Research and Technology Park Master Plan update, located in Kihei, Maui, Hawaii at TMK's: (2) 2-2-024:1-9,14-18,31,32, 34, 36-46 and (2) 2-2-002:054 (por.)

Thank you for your letter of July 13, 2012. The Applicant has reviewed the Standard Comments and will comply, as applicable with the proposed project.

Thank you again for providing us with your response. Please feel free to call me or Mr. Brett Davis of our office at (808) 242-1955 should you have any questions.

Sincerely yours,

Christopher L. Hart, President
Landscape Architect • Planner

CC. Mr. Steve Perkins, Pacific Rim Land, Inc.
Project File 08-132

NEIL ABERCROMBIE
GOVERNOR OF HAWAII



LORETTA J. FUDDY, A.C.S.W., M.P.H.
DIRECTOR OF HEALTH

STATE OF HAWAII
DEPARTMENT OF HEALTH
SAFE DRINKING WATER BRANCH

919 ALA MOANA BLVD., ROOM 308
HONOLULU, HI 96814-4920

In reply, please refer to:
File: SDWB
DEISMau1.DOC

July 24, 2012

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JUL 26 2012

Mr. Brett Davis
Chris Hart & Partners, Inc.
115 North Market Street
Wailuku, Hawaii 96793-1717

CHRIS HART & PARTNERS, INC.
Landscape Architecture and Planning

CC. Brett

081132

Dear Mr. Davis:

SUBJECT: DRAFT ENVIRONMENTAL IMPACT STATEMENT (EIS)
MAUI RESEARCH AND TECHNOLOGY PARK MASTER PLAN UPDATE
MAKAWAO, MAUI, HAWAII

The Safe Drinking Water Branch (SDWB) has reviewed the subject document and has the following comments:

1. The following comments in this letter are based primarily on Appendix F of the subject document titled, "Preliminary Engineering & Drainage Report" prepared by Warren S. Unemori Engineering, Inc., specifically Chapter 3 Water System.
2. If a County water supply cannot be obtained, the proposed water system's brackish water sources, reverse osmosis (RO) treatment and distribution system infrastructure that serve the development areas identified as "Phase 1" and "Phase 2" throughout the DEIS document qualify as a public water system. Federal and state regulations define a public water system as a system that serves 25 or more individuals at least 60 days per year or has at least 15 service connections. All public water system owners and operators are required to comply with Hawaii Administrative Rules (HAR), Title 11, Chapter 20, "Rules Relating to Public Water Systems."
3. All new public water systems are required to demonstrate and meet minimum capacity requirements prior to their establishment. This requirement involves demonstration that the system will have satisfactory technical, managerial and financial capacity to enable the system to comply with safe drinking water standards and requirements in accordance with HAR Section 11-20-29.5, "Capacity demonstration and evaluation."
4. Projects that propose development of new sources of drinking water serving or proposed to serve a public water system must comply with the terms of HAR Section 11-20-29, "Use of new sources of raw water for public water systems."

This section requires that all new public water system sources be approved by the Director of Health prior to its use. Such approval is based primarily upon the submission of a satisfactory engineering report which addresses the requirements set in HAR Section 11-20-29.

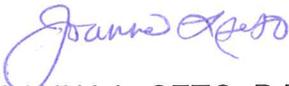
5. The engineering report must identify all potential sources of contamination and evaluate alternative control measures which could be implemented to reduce or eliminate the potential for contamination, including treatment of the water source. In addition, water quality analyses for all regulated contaminants, performed by a laboratory certified by the State Laboratories Division of the State of Hawaii, must be submitted as part of the report to demonstrate compliance with all drinking water standards. Additional parameters may be required by the Director for this submittal or additional tests required upon his or her review of the information submitted.
6. All sources of public water systems must undergo a source water assessment which will delineate a source water protection area. This process is preliminary to the creation of a source water protection plan for that source and activities which will take place to protect the source of drinking water.
7. Projects proposing to develop new public water systems or proposing substantial modifications to existing public water systems must receive approval by the Director of Health prior to construction of the proposed system or modification in accordance with HAR Section 11-20-30, "New and modified public water systems." These projects include treatment, storage and distribution systems of public water systems.
8. All public water systems must be operated by certified distribution system and water treatment plant operators as defined by Hawaii Administrative Rules, Title 11, Chapter 25, "Rules Relating to Certification of Public Water System Operators."
9. All projects which propose the use of dual water systems or the use of a non-potable water system in proximity to an existing drinking water system to meet irrigation or other needs must be carefully designed and operated to prevent the cross-connection of these systems and prevent the possibility of backflow of water from the non-potable system to the drinking water system. The two systems must be clearly labeled and physically separated by air gaps or reduced pressure principle backflow prevention devices to avoid contaminating the drinking water supply. In addition backflow devices must be tested periodically to assure their proper operation. Further, all non-potable spigots and irrigated areas should be clearly labeled with warning signs to prevent the inadvertent consumption on non-potable water. Compliance with Hawaii Administrative Rules, Title 11, Chapter 21, "Cross-Connection and Backflow Control" is also required.

Mr. Brett Davis
July 24, 2012
Page 3

10. All projects which propose the establishment of a potentially contaminating activity (as identified in the Hawai'i Source Water Assessment Plan) within the source water protection area of an existing source of water for a public water supply should address this potential and activities that will be implemented to prevent or reduce the potential for contamination of the drinking water source.
11. The Underground Injection Control (UIC) line in the vicinity exists along the 600-foot contour, above the proposed brackish well sources for the subject project. Establishing a new drinking water well below the UIC line can negatively affect injection well viability in the water well's capture zone. Outreach measures may be required by the Applicant to seek, notify, and solicit comments from affected property owners (guidance enclosed). The notification and solicitation of comments shall inform the affected property owners about the proposed drinking water well and the implications that protective measures for the drinking water well will have on properties within or near to the well's capture zone. The cost for such measures is the responsibility of the water system owner. Materials and information contained in public notices and direct mailings must be reviewed and approved by the SDWB and its UIC Section prior to distribution.

If there are any questions, please call Mr. Michael Miyahira, Engineering Section Supervisor, SDWB at (808) 586-4258.

Sincerely,



JOANNA L. SETO, P.E., CHIEF
Safe Drinking Water Branch
Environmental Management Division

MM:slm

Enclosures

c: Mr. Steve Perkins, Project Manager
Maui R&T Partners, LLC
1300 North Holopono, Suite 201
Kihei, Hawaii 96753 (w/enclosures)

HAWAII STATE DEPARTMENT OF HEALTH
SAFE DRINKING WATER BRANCH

PUBLIC NOTIFICATION PROCEDURES FOR NEW DRINKING WATER SOURCES
FOR REGULATED PUBLIC WATER SYSTEMS BELOW THE
UNDERGROUND INJECTION CONTROL LINE
MAY 2009

Establishing a new drinking water well below the Underground Injection Control (UIC) line can negatively affect injection well viability in the water well's capture zone. Outreach measures may be required by the Applicant to seek, notify, and solicit comments from affected property owners. The notification and solicitation of comments shall inform the affected property owners about the proposed drinking water well and the implications that protective measures for the drinking water well will have on properties within or near to the well's capture zone. The cost for such measures is the responsibility of the water system owner. Materials and information contained in public notices and direct mailings, must be reviewed and approved by the Safe Drinking Water Branch (SDWB) and its UIC Section prior to distribution.

1. The public notice and information mailings must be distributed before the engineering report for a new drinking water source for regulated public water systems may proceed to the interagency review process. At the SDWB's discretion, the interagency review may run concurrently with the public notice period.
2. To begin the public notification process, the Applicant shall submit to the SDWB:
 - A map of appropriate scale and detail delineating the well's entire capture zone;
 - Identification of all properties and property owners within the entire capture zone; and
 - Proposed materials and information to implement contacting affected land owners, for example, contents for a public notice and for direct mailings.

The capture zone is defined as a 1/4-mile radius around the drinking water well. If the proposed drinking water well is artesian, the capture zone also includes a

1/2-mile swath running hydrologically up-gradient from the drinking water well to the UIC line.

3. The submitted information and materials will be used to draft a public notice and to generate for-your-information mailers, the reproduction and distribution of which will be at the Applicant's expense. The Applicant will be informed if further information or clarification is needed to complete this task.
4. Once approved, the Applicant shall publish the public notice in the local County newspaper(s) (e.g. Garden Isle, Honolulu Star-Bulletin, Maui News, West Hawaii Today and Tribune Herald) and send the for-your-information mailers to all identified property owners within the capture zone by certified mail with return receipt.
5. The Applicant shall submit verification of the public notice and mailing of the for-your-information mailers to the SDWB.
6. If comments are generated from the public notice or mailers, the Applicant shall respond to all comments with consensus and input from the SDWB. The Applicant shall mail all comment responses by certified mail with return receipt. A copy of all responses shall be submitted to the SDWB.
7. The conclusion of this initiative to inform affected property owners about a proposed drinking water well will depend on the complexity of comments and issues to be resolved. The SDWB may impose additional conditions on the drinking water well, including but not limited to, additional regulatory monitoring of contaminants known to be injected into the aquifer.

Other Considerations

If the water system owns all of the property within the capture zone, the Applicant shall submit documentation of property ownership, and parts of the above procedures may be waived by the SDWB.

The SDWB strongly recommends siting drinking water wells, where the water system may exercise source water protection and eliminate potentially contaminating activities, such as injection wells (e.g. owning all the land within the capture

zone). In addition, if the water system-owned property is later sold, the SDWB strongly recommends including a deed restriction prohibiting potentially contaminating activities.

The SDWB reserves the authority to amend these procedures or contents for applicability, efficiency, effectiveness, clarity or changing concerns. An amendment, if any, may be effective immediately.



Landscape Architecture
City & Regional Planning

September 10, 2012

Ms. Joanna L. Seto, P.E., Chief
State of Hawaii, Dept. of Health
Safe Water Drinking Branch
Environmental Management Division
919 Ala Moana Blvd., Room 308
Honolulu, HI 96814 - 4920

Dear Ms. Seto,

RE: Comments on the Draft Environmental Impact Statement for the Proposed Maui Research and Technology Park (MRTP) Master Plan update, located in Kihei, Maui, Hawaii at TMK's: (2) 2-2-024:1-9,14-18,31,32, 34, 36-46 and (2) 2-2-002:054 (por.)

Thank you for your letter of July 24, 2012, I am pleased to provide the following responses to your numerated comments:

1. No Comment to respond to.
2. The Applicant's preference is to continue the current use of the Maui County water supply to the MRTP as well as the planned expansion areas. In the event the County can not provide water for the MRTP planned expansion the Applicant is aware that a water system will have to be developed and operated in compliance with Hawaii Administrative Rules (HAR), Title 11, Chapter 20, "Rules Relating to Public Water Systems.
3. In the event the proposed project requires a new public water system, the applicant will demonstrate that the system will have satisfactory technical, managerial and financial capability to enable the system to comply with safe drinking water standards and requirements in accordance with HAR Section 11-20-29.5, "Capacity demonstration and evaluation.

4. If a new source of drinking water is necessary, the applicant will comply with the terms of HAR Section 11-20-29, "Use of new sources of raw water for public water systems." The Applicant is aware that all new public water system sources be approved by the Director of Health prior to its use.

5. The Applicant is aware that the engineering report must identify all potential sources of contamination and evaluate alternative control measures which could be implemented to reduce or eliminate the potential for contamination, including treatment of the water source. Additionally the Applicant is aware that water quality analyses performed by a laboratory certified by the State Laboratories Division of the State of Hawaii is required as part of the report.

6. The Applicant is aware that sources of public water systems must undergo a source water assessment which will delineate a source water protection area.

7. If a new public water system is developed for the MRTP the Applicant is aware that the water system must receive approval by the Director of The State Department of Health prior to construction or modification in accordance with HAR Section 11-20-30.

8. If necessary, new Public water systems will be operated by certified distribution systems and water treatment plant operator as defined by Hawaii Administrative Rules, Title 11, Chapter 25, "Rules Relating to certification of Public Water System Operators."

9. The MRTP will be designed and operated to prevent the possibility of backflow of water from the non-potable system to the drinking water system. The MRTP is connected to the Kihei Waste Water Treatment Facility which provides non-potable water to the MRTP. The non-potable system is clearly labeled and exposed infrastructure is painted purple. The water systems will be in compliance with Hawaii Administrative Rules, Title 11, Chapter 21, "Cross-Connection and Backflow Control."

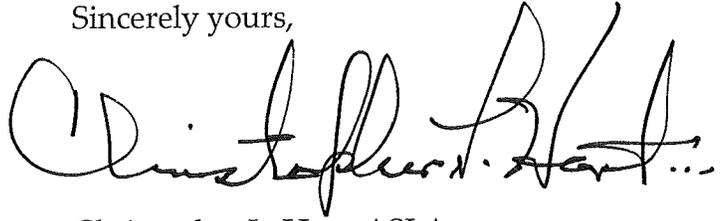
10. The proposed master plan update of the MRTP will not establish potential contaminating activity; therefore contamination of drinking water source is not anticipated.

Ms. Joanna L. Seto, P.E. Chief
DOH Response letter
September 10, 2012
Page 3 of 3

11. The Applicant will carefully construct any required water wells in coordination with Safe Water Drinking Branch and affected property owners to ensure that the project does not affect injection well viability in the water well's capture zone.

Thank you again for providing us with your comments. Please feel free to call me or Mr. Brett Davis of our office at (808) 242-1955 should you have any questions.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Christopher L. Hart". The signature is fluid and cursive, with a large initial "C" and "H".

Christopher L. Hart, ASLA
President
Landscape Architect • Planner

CC. Mr. Steve Perkins, Pacific Rim Land, Inc.
Project File 08-132



STATE OF HAWAII
DEPARTMENT OF HEALTH
ENVIRONMENTAL MANAGEMENT DIVISION
SOLID AND HAZARDOUS WASTE BRANCH
919 ALA MOANA BOULEVARD, #212
HONOLULU, HAWAII 96814

In reply, please refer to:
EMD/SHWB

July 25, 2012

S0723JV

Mr. Steve Perkins
Project Manager
Maui R&T Partners, LLC
1300 North Holopono St., Suite 201
Kihei, Hawaii 96753

RECEIVED

JUL 30 2012

CHRIS HART & PARTNERS, INC.
Landscape Architecture and Planning

Ch. Hart
08/13/12

Dear Mr. Perkins:

SUBJECT: DEIS for Maui Research & Technology Park Master Plan Update
(TMKs 2nd, 2-2-024:1-9, 14-18, 31, 32, 34, 36, 37; 2nd, 2-2-002:54 (por.))

The Department of Health (DOH), Office of Solid Waste Management has reviewed the draft environmental impact statement for the proposed project, which updates the master plan for the Maui Research & Technology Park (MRTP) by expanding the current single-use large lot research and technology campus into a larger mixed-use community that will serve as a high-technology employment base. We understand that the MRTP currently contains five (5) buildings that provide office space to twenty-five (25) tenants. We understand that the proposed new construction will take place on vacant land elsewhere within the project site. Besides waste from the office buildings, we also understand that in the short term, waste generated from site preparation will consist primarily of vegetation, rocks and debris from clearing, grubbing and grading, and from new construction. We offer the following comments on the proposed new construction activities. The assumption is that no demolition of any existing buildings or structures is involved.

1. Please make arrangements with DOH-permitted facilities on Maui for the potential disposition of any unpainted, uncontaminated concrete (no asbestos, lead-based paint or other types of contamination) from new construction.
2. If on-site reuse of concrete is intended, then the uncontaminated concrete must also meet the state's definition of "inert fill material" defined as:

Section 342H-1, HRS Definition.

"Inert fill material" means earth, soil, rocks, rock-like material such as cured

Mr. Steve Perkins
July 25, 2012
Page 2

- asphalt, brick, and clean concrete less than eight inches in diameter, except as specified by a licensed soils engineer with no exposed steel reinforcing rod. The fill material shall not contain vegetation or organic material, or other solid waste.
3. Appropriately dispose of new construction gypsum and plaster. Currently, no recycling facility in Maui County is permitted to accept gypsum board from demolition projects.
 4. We assume that any wood waste from new construction stages is of the treated variety. Such wood waste needs to be disposed of at DOH-permitted disposal facilities, not recycled.
 5. Dispose of non-reusable glass at DOH-permitted disposal facilities. We encourage the reuse of glass if in a reusable form. Permitted glass recyclers on Maui County presently only accept glass bottles for recycling.
 6. Please send any greenwaste to DOH-permitted facilities on Maui. Each facility's ability to process greenwaste varies, so please contact them first prior to delivery. Whenever feasible, we also encourage on-site reuse of any trees planned for removal.

Please be reminded that the applicant's submittal was reviewed with respect to solid waste management and disposal issues only. We recommend that the applicant obtain approval from other agencies (such as OSHA) that may be involved in the oversight and implementation of other various aspects of their proposed action.

If you have any questions or comments, please contact John Valera of the Office of Solid Waste Management at (808) 586-4226.

Sincerely,


STEVEN Y.K. CHANG, P.E., CHIEF
Solid and Hazardous Waste Branch

c: Mr. Brett Davis, Chris Hart & Partners, Inc.



Landscape Architecture
City & Regional Planning

August 27, 2012

Mr. Steve Y.K. Chang, P.E., Chief
State of Hawaii, Dept. of Health
Solid and Hazardous Waste Branch
Environmental Management Division
919 Ala Moana Blvd., #212
Honolulu, HI 96814

Dear Mr. Chang,

RE: Comments on the Draft Environmental Impact Statement for the Proposed Maui Research and Technology Park (MRTP) Master Plan update, located in Kihei, Maui, Hawaii at TMK's: (2) 2-2-024:1-9,14-18,31,32, 34, 36-46 and (2) 2-2-002:054 (por.)

Thank you for your letter of July 25, 2012, I am pleased to provide the following responses to your numerated comments.

1. The contractor will make arrangements to properly dispose of construction materials in a safe manner, at State Department of Health (DOH)-permitted facilities on Maui.
2. There is no proposed reuse of concrete at the MRTP; therefore this comment is not applicable to the master plan update.
3. There are new construction materials disposal facilities being proposed on Maui, and the contractor will properly dispose of new construction gypsum and plaster during the construction phase.
4. Treated wood waste from new construction will not be recycled. Wood waste will be disposed of at a DOH-permitted disposal facility.

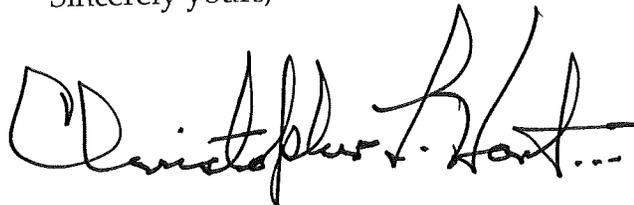
Mr. Steve Change, P.E. Chief
DOH response letter
MRTP DEIS
August 27, 2012
Page 2 of 2

5. During construction non-reusable glass will be disposed of at a DOH-permitted disposal facility.

6. Green waste will be sent to a DOH-permitted facility on Maui. Whenever feasible the developer will keep tree removal to a minimum.

Thank you again, for providing us with your comments. Please feel free to call me or Mr. Brett Davis of our office at (808) 242-1955 should you have any questions.

Sincerely yours,

A handwritten signature in black ink that reads "Christopher L. Hart". The signature is written in a cursive, flowing style with a long horizontal stroke at the end.

Christopher L. Hart, ASLA
President
Landscape Architect • Planner

CC. Mr. Steve Perkins, Pacific Rim Land, Inc.
Project File 08-132



Landscape Architecture
City & Regional Planning

March 1, 2013

Mr. Steve Y.K. Chang, P.E., Chief
State of Hawaii, Dept. of Health
Solid and Hazardous Waste Branch
Environmental Management Division
919 Ala Moana Blvd., #212
Honolulu, HI 96814

Dear Mr. Chang,

RE: Comments on the Draft Environmental Impact Statement for the Proposed Maui Research and Technology Park (MRTP) Master Plan update, located in Kihei, Maui, Hawaii at TMK's: (2) 2-2-024:1-9,14-18,31,32, 34, 36-46 and (2) 2-2-002:054 (por.)

Thank you for your letter of July 25, 2012; this letter supersedes the response letter dated August 27, 2012 to conform to HAR §11-200-22(c)(2) Review of Environmental Impact Statements, *"Response letters reproduced in the text of the final EIS shall indicate verbatim changes that have been made to the text of the draft EIS."* The following language is in the final EIS and can be found in Section III A. 4.

The Applicant is proposing the following mitigation measures based on comments from the Department of Health, Solid and Hazardous Waste Branch:

1. The contractor will make arrangements to properly dispose of construction materials in a safe manner, at State Department of Health (DOH)-permitted facilities on Maui.
2. There is no proposed reuse of concrete at the MRTP.
3. There are new construction materials disposal facilities being proposed on Maui, and the contractor will properly dispose of new construction gypsum and plaster during the construction phase.
4. Treated wood waste from new construction will not be recycled. Wood waste will be disposed of at a DOH-permitted disposal facility.

Mr. Steve Change, P.E. Chief
DOH response letter
MRTP DEIS
March 1, 2012
Page 2 of 2

5. During construction non-reusable glass will be disposed of at a DOH-permitted disposal facility.

6. Green waste will be sent to a DOH-permitted facility on Maui. Whenever feasible the developer will keep tree removal to a minimum.

Thank you again for providing us with your comments. Please feel free to call Mr. Brett Davis at (808) 242-1955 should you have any questions.

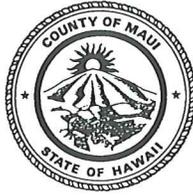
Sincerely yours,



Jordan E. Hart
President

CC. Mr. Steve Perkins, Pacific Rim Land, Inc.
Project File 08-132

ALAN M. ARAKAWA
Mayor



GLENN T. CORREA
Director

PATRICK T. MATSUI
Deputy Director

(808) 270-7230
FAX (808) 270-7934

DEPARTMENT OF PARKS & RECREATION
700 Hali'a Nakoa Street, Unit 2, Wailuku, Hawaii 96793

RECEIVED

JUL 31 2012

CHRIS HART & PARTNERS, INC.
Landscape Architecture and Planning

cc: Brett 08/13/12

July 25, 2012

Mr. Steve Perkins, Project Manager
Maui R&T Partners, LLC
1300 North Holopono, Suite 201
Kihei, Hawaii 96753

Dear Mr. Perkins:

SUBJECT: Draft Environmental Impact Statement (EIS), Maui County Change in Zoning (CIZ) and Community Plan Amendment (CPA) Applications for the Maui Research and Technology Park Master Plan Update

Thank you for the opportunity to review the applications for the subject project. The Maui Research and Technology Park Master Plan Update is subject to parks and playgrounds assessment requirements pursuant to Section 18.16.320, Maui County Code. The applicant should coordinate discussion with our Department on how these requirements will be satisfied.

Please feel free to contact me or Karla Peters, CIP Coordinator, at 270-7981, should you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "GLENN T. CORREA".

GLENN T. CORREA
Director of Parks and Recreation

c: Robert Halvorson, Chief of Planning and Development
Brett Davis, Chris Hart & Partners, Inc.

GTC:RH:kp



Landscape Architecture
City & Regional Planning

August 17, 2012

Mr. Glenn T. Correa, Director
County of Maui, Department of Parks & Recreation
700 Hali'a Nakoa Street, Unit 2
Wailuku, HI 96793

Dear Mr. Correa,

RE: Comments on the Draft Environmental Impact Statement for the Proposed Maui Research and Technology Park (MRTP) Master Plan Update, located in Kihei, Maui, Hawaii at TMK's: (2) 2-2-024:1-9,14-18,31,32, 34, 36-46 and (2) 2-2-002:054 (por.)

Thank you for your letter of July 25, 2012 indicating that the Master Plan Update is subject to the parks and playgrounds assessment requirements pursuant to Section 18.16.320, Maui County Code. Please be assured that the Applicant will coordinate with the Department of Parks and Recreation regarding the parks and playgrounds assessment requirements, and the integration of a comprehensive network of parks and open spaces within the Master Plan.

Thank you again, for providing us with your response. Please feel free to call myself or Mr. Brett Davis at (808) 242-1955 should you have any questions.

Sincerely yours,

Christopher L. Hart, ASLA
President
Landscape Architect • Planner

CC. Mr. Steve Perkins, Pacific Rim Land, Inc.
Project File 08-132

ALAN M. ARAKAWA
Mayor

DAVID C. GOODE
Director

ROWENA M. DAGDAG-ANDAYA
Deputy Director

Telephone: (808) 270-7845
Fax: (808) 270-7955



COUNTY OF MAUI
DEPARTMENT OF PUBLIC WORKS
200 SOUTH HIGH STREET, ROOM NO. 434
WAILUKU, MAUI, HAWAII 96793

RALPH NAGAMINE, L.S., P.E.
Development Services Administration

CARY YAMASHITA, P.E.
Engineering Division

BRIAN HASHIRO, P.E.
Highways Division

July 26, 2012

RECEIVED

JUL 31 2012

CHRIS HART & PARTNERS, INC.
Landscape Architecture and Planning

CC: Brett 08/13/12

Mr. Brett Davis
CHRIS HART & PARTNERS, INC.
115 North Market Street
Wailuku, Maui, Hawaii 96793

Dear Mr. Davis:

**SUBJECT: DRAFT ENVIRONMENTAL IMPACT STATEMENT FOR
MAUI RESEARCH AND TECHNOLOGY PARK MASTER
PLAN; TMK: (2) 2-2-024:031 (VARIOUS TAX MAP KEYS)**

We reviewed the subject application and have the following comments:

1. The applicant shall be responsible for all required improvements as required by Hawaii Revised Statutes, Maui County Code and rules and regulations.
2. As applicable, construction plans shall be designed in conformance with Hawaii Standard Specifications for Road and Bridge Construction dated 2005 and Standard Details for Public Works Construction, 1984, as amended.
3. As applicable, worksite traffic-control plans/devices shall conform to "Manual on Uniform Traffic Control Devices for Streets and Highways", 2003.
4. Mauka by-pass highway must be coordinated with this project. Alignment and laneage requirements must be in conformance with South Maui Regional Traffic Study and discussed with Engineering Division staff.
5. Drainage master plan must encompass all watershed areas contributing to pass through flows and analyze for downstream

Mr. Brett Davis
July 26, 2012
Page 2

impacts. Mitigation efforts should integrate both off-site and on-site drainage flows.

Please call Rowena M. Dagdag-Andaya at 270-7845 if you have any questions regarding this letter.

Sincerely,



DAVID C. GOODE
Director of Public Works

DCG:RMDA:ls

xc: Highways Division
Engineering Division
Maui R&T Partners, LLC

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CHRIS
HART
& PARTNERS, INC.

Landscape Architecture
City & Regional Planning

October 12, 2012

Mr. David Goode, Director
County of Maui, Department of Public Works
200 South High Street Room No 434
Wailuku, HI 96793

Dear Mr. Goode,

RE: Comments on the Draft Environmental Impact Statement for the Proposed Maui Research and Technology Park (MRTP) Master Plan update, located in Kihei, Maui, Hawaii at TMK's: (2) 2-2-024:1-9,14-18,31,32, 34, 36-46 and (2) 2-2-002:054 (por.)

Thank you for your letter of July 26, 2012. I am pleased to provide the following responses to your comments (*in italics*):

1. *The Applicant shall be responsible for all required improvements as required by Hawaii Revised Statutes, Maui County code and rules and regulations.*

The Applicant acknowledges that they will be responsible for infrastructure improvements as required by Hawaii Revised Statutes, Maui County Code and adopted rules and regulations.

2. *As applicable, construction plans shall be designed in conformance with Hawaii Standards Specification for Road and Bridge Construction dated 2005 and Standard Details for Public Works Construction, 1984, as amended.*

As applicable, construction plans will be designed in conformance with Hawaii Standards Specifications for Road and Bridge Construction dated 2005 and Standard Details for Public works Construction, 1984, as amended.

3. *As applicable, worksite traffic-control plans/devices shall conform to "Manual on Uniform Traffic Control Devices for Streets and Highways", 2003.*

As applicable, worksite traffic control plans/devices will conform to "Manual on Uniform Traffic Control Devices for Streets and Highways", 2003.

4. *Mauka by-pass highway must be coordinated with this project. Alignment and laneage requirements must be in conformance with South Maui Regional Traffic Study and discussed with Engineering Division staff.*

In a meeting with the Department of Public Works on August 30, 2012 we were informed that the South Maui Regional Traffic Study has not been started because the Hawaii State Traffic Plan is currently being prepared. Therefore, Kihei as a "Sub Area" will not be planned and the need for a mauka by-pass highway will not be addressed until after the State Plan is completed. (Note: No completion date for the Hawaii State Traffic Plan was discussed.)

However, in consideration of the foregoing please note the enclosed project master plan and the proposed construction of parallel North/South Collector Roads identified as North Ninau and an unnamed street. These will be full service streets to be constructed as infrastructure serving the MRTP and connecting proposed projects to the North and South.

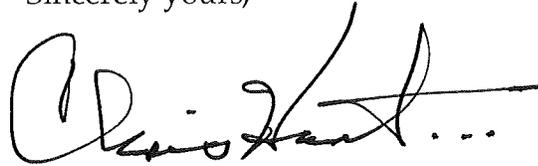
5. *Drainage master plan must encompass all watershed areas contributing to pass through flows and analyze for downstream impacts. Mitigation efforts should integrate both off-site and on-site drainage flows.*

Also at the August 30, 2012 meeting with the Department of Public Works, our project engineer, Warren S. Unemori Engineering Inc., provided an overview of the drainage master plan. The drainage master plan encompasses all watershed areas and analyzes downstream impacts. Mitigation measures include a series of strategically located drainage retention basins, and channels designed to mitigate downstream impacts to makai landowners. The drainage master plan was designed to County standards which will mitigate 100% of the runoff generated from the incremental development of impervious surfaces. (See: attached drainage master plan).

Mr. David Goode, Director
Response Letter
October 12, 2012
Page 3 of 3

Thank you again for providing us with your comments. Please feel free to call me or Mr. Brett Davis at (808) 242-1955 should you have any questions.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Christopher L. Hart", with a long horizontal flourish extending to the right.

Christopher L. Hart, ASLA
President
Landscape Architect • Planner

Enclosures

CC. Mr. Steve Perkins, Pacific Rim Land, Inc.
Project File 08-132

NEIL ABERCROMBIE
Governor



DANIEL E. ORODENKER
Executive Officer

LAND USE COMMISSION
Department of Business, Economic Development & Tourism
State of Hawai'i

July 30, 2012

RECEIVED

AUG - 1 2012

Mr. Steve Perkins
Maui R&T Partners, LLC
1300 North Holopono, Suite 201
Kihei, Hawaii 96753

CHRIS HART & PARTNERS, INC.
Landscape Architecture and Planning
CV. MUA 081132

Dear Mr. Perkins:

Subject: Draft Environmental Impact Statement (DEIS)
Maui Research & Technology Park Master Plan Update
Kihei, Maui, Hawai'i
Tax Map Keys: 2-2-24: 1-9, 14-18, 31, 32, 34, 36, and 37 and 2-2-02:
por. 54

We have reviewed the DEIS for the subject project and have the following comments to offer:

- 1) In accordance with section 11-200-17(e)(5), Hawaii Administrative Rules (HAR), the phasing and timing of the action should be provided as part of the project description. We acknowledge the discussion on the development phasing. However, we request that additional detail be provided to indicate the year(s) in which specific components of the project within the Petition Area as well as the overall technology park area are anticipated to commence and be completed.
- 2) In accordance with section 11-200-17(e)(7), HAR, a historic perspective should be provided as part of the project description. We acknowledge that there is some discussion on the past events leading up to the Master Plan Update. As we pointed out in our July 6, 2010, comment letter on the Petition for District Boundary Amendment (Petition), the Petition Area includes lands that are

subject to incremental districting for a research and technology park pursuant to Docket No. A84-585/Maui Economic Development Board, Inc., and that there was no application filed for redistricting of these lands, identified as the new Second Increment, due to the slow pace of development. Please include a discussion on this historical context as it has a direct bearing on the use of these lands.

- 3) In accordance with section 11-200-17(e), HAR, a description of the development should be provided. We acknowledge that the DEIS includes such a description; however, there is no information on the estimated cost of the development. We request that information on the cost of the offsite and onsite infrastructure as well as the construction costs of the individual components of the project be provided. Such costs should differentiate between the development planned within the Petition Area and the overall technology park area.

In addition, we request that the *estimated* price ranges of the proposed single and multi-family units, including the affordable units, be provided. Please be advised that section 15-15-50(c)(7), HAR, requires, among other things, that the selling prices of the lots/units be included as part of the Petition.

- 4) In accordance with section 11-200-17(h), HAR, a statement of the relationship of the proposed action to land use plans, policies, and controls for the affected area should be provided. We acknowledge that the DEIS includes an assessment of the project in relation to the applicable goals, objectives, and policies of the State Plan, including the priority guidelines. Please also include an analysis of the project in relation to the priority guidelines and principles to promote sustainability under section 226-108 that were incorporated as SB283, SD1, HD1, CD1, and signed into law as Act 181, SLH 2011.

In accordance with the above section, the status of each identified approval should also be described. We acknowledge that the DEIS includes a listing of anticipated permits and approvals. We request that to the extent possible the *projected* submittal dates (i.e., by

month/year) of the various applications to the responsible agencies be provided.

- 5) In accordance with section 11-200-17(i), HAR, the DEIS should include a statement of the probable impact of the proposed action on the environment, and impacts of the natural or human environment on the project, which shall include consideration of all phases of the action and consideration of all consequences on the environment; direct and indirect effects shall be included. We note that there is no discussion in the DEIS on the existing civil defense facilities in the area and on the potential impacts on such facilities from the project. We request that the Final EIS address this matter, including any plan to fund and construct adequate civil defense measures (sirens) to serve the Petition Area as may be required by the State Department of Defense, Office of Civil Defense.
- 6) In accordance with section 11-200-17(n), HAR, the DEIS shall include a separate and distinct section that summarizes unresolved issues. We acknowledge that the DEIS includes such a section. However, we request that this section include a timetable for resolution of the issue, a description of the applicable agencies that would be integral to such resolution, and the options available to the Petitioner/project if the issues are not resolved in a timely manner relative to the commencement of the project.

Please also include the matter of the preceding boundary amendment petition filed under Docket No. A84-585/Maui Economic Development Board, Inc., as an unresolved issue. Until such time that this matter is properly resolved, we believe that it should be identified as an outstanding land use entitlement issue.

- 7) In the DEIS, there are numerous references to the term *potable water* and *non-potable water*. We request that they be replaced by the terms *drinking water* and *non-drinking water*, respectively. We have been advised that although potable water has generally been used to mean drinking water, the State Department of Health (DOH) uses the latter term specifically to indicate water for human consumption that is derived from surface water and/or

Mr. Steve Perkins

July 30, 2012

Page 4

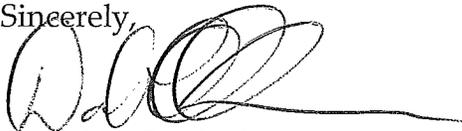
groundwater and is regulated by the DOH pursuant to chapter 11-20, HAR.

Finally, we would like to remind the Petitioner of the outstanding issues pointed out in our July 6, 2010, comment letter on the Petition. Those matters will need to be addressed before the Petition is deemed a proper filing and accepted for processing in accordance with section 15-15-50(f), HAR.

We have no further comments to offer at this time. Thank you for the opportunity to comment on the subject DEIS.

Should you have any questions, please feel free to call Bert Saruwatari of our office at 587-3822.

Sincerely,

A handwritten signature in black ink, appearing to read 'D. Orodener', with a long horizontal line extending to the right.

Daniel E. Orodener

Executive Officer

c: Michael Summers



**CHRIS
HART**
& PARTNERS, INC.

Landscape Architecture
City & Regional Planning

January 30, 2013

Mr. Daniel E. Orodener, Director
Land Use Commission
State of Hawaii, DBEDT
235 South Beretania Street, Suite 406
Honolulu, HI 96813

Dear Mr. Orodener,

RE: Comments on the Draft Environmental Impact Statement for the Proposed Maui Research and Technology Park Master Plan update, located in Kihei, Maui, Hawaii at TMK's: (2) 2-2-024:1-9,14-18,31,32, 34, 36, and 37 and (2) 2-2-02:054 (por.)

Thank you for your letter of July 30, 2012; I am pleased to provide the following responses which are presented in the same order as your numerated comments:

1. The intended phasing and timing of the proposed development is reflected in the Incremental Development Plan to be included in the Petition and the Final Environmental Impact Statement (FEIS). The Plan will provide the anticipated timing for commencement and completion of specific components of the project. The Plan will be described in Section II. H, Development Phasing, and included as Appendix Q of the FEIS.
2. The following is a historic timeline of events regarding the redistricting of the MRTP property. Maps are attached and included as Appendix N if the FEIS.
 - On November 9, 1984, Maui Economic Development Board, Inc. filed its Petition for District Boundary Amendment with the Land Use Commission, State of Hawaii ("LUC") to reclassify approximately 300 acres of land in Kihei, Maui from the agricultural district to the urban

district to develop a high technology park in LUC Docket No. A84-585.

- On July 15, 1985, the LUC issued its Findings of Fact, Conclusions of Law and Decision and Order ("D&O"). The southern half of the petition area, comprising of approximately 150 acres, was reclassified to the urban district and the northern half of the petition area was approved for incremental districting.
- The attached Figure 1-3 shows the current proposed project and identifies five areas as Areas A, B, C, D and E.
- The attached Figure 1-4 depicts the LUC's ruling in its July 15, 1985 D&O by showing the urban district lands in the hatched area and the lands approved for incremental districting in the cross hatched area, as superimposed upon Areas A, B, C, D and a 20 acre area south of Area B.
- On September 11, 1985, Maui Economic Development Board, Inc. filed its Motion to Modify Petition and to Classify Approximately 300 Acres of Land Currently in the Agricultural District into the Urban District at Kihei, Maui, Hawaii ("Motion to Modify"). The Motion to Modify requested that approximately 111 acres of urban land be relocated to the northern half, keeping approximately 39 acres remaining in the urban district.
- On February 25, 1986, the LUC issued its Amended Findings of Fact, Conclusions of Law and Decision and Order ("Amended D&O") approving the Motion to Modify. The attached Figure 1-5 depicts the LUC's ruling in its February 25, 1986 Amended D&O by showing the urban district lands in Areas A and C as hatched, and the lands approved for incremental districting in Areas B and D as cross hatched.
- On November 20, 2007, Maui R&T Partners, LLC ("MRTP") acquired a fee simple interest in the Petition Area. MRTP has since taken over the management of the Project as well as developing the new master plan for the Project.
- On June 23, 2010, MRTP filed its Petition for District Boundary Amendment in LUC Docket No. A10-787, for the reclassification of

approximately 253.05 acres from the agricultural district to the urban district ("Petition"), comprised of Areas B, D and E on Figure 1-3. The Petition proposes a redesigned Project to implement a new sustainable community based on mixed uses that will allow for people to work, live and play within or near the Project.

- To reconcile the differences in the prior project with the current Project, MRTP will also be filing a motion to amend the February 25, 1986 amended D&O to allow for the additional mixed uses in Area C. The intent is for the motion to amend to be filed so that the hearings in both LUC dockets may be consolidated and the entire new Project may be considered at the same time, where Areas A and C will be subject to LUC Docket No. A84-585 and Areas B, D and E will be subject to LUC Docket No. A10-787.
3. As stated in response number 1 above, an Incremental Development Plan will be included in the FEIS as Appendix Q and will also be discussed in the body of the document in Section II H, Development Phasing. The Plan will include cost estimates for offsite and onsite infrastructure as well as for the individual components of the project. The costs will differentiate between the development planned within the Petition Area and the overall MRTP area. The estimated selling price ranges of the proposed single family and multi-family units, including the affordable units, will be provided.
 4. A Sustainability Plan is currently being developed for the Master Plan Update. The Sustainability Plan will include an analysis of the project in relation to the priority guidelines and principles to promote sustainability under section 226-108. Sustainability will be discussed in Section II F. 5 Sustainability Plan, and the complete Plan will be included as Appendix O of the FEIS, as well as included in the Petition.

To the extent possible, the projected submittal dates for the required permits and approvals are attached and will be included in the FEIS.

5. The Applicant will coordinate with Hawaii Civil Defense on the adequacy of civil defense facilities in the area. The FEIS will address this item in Section III. C6 Civil Defense. (Note: Copy of Civil Defense response letter is attached)

6. To the extent possible, the FEIS will include a timetable for anticipated resolution of unresolved issue, of which Docket No. A84-585/Maui Economic Development Board, Inc. will be identified as an unresolved issue. See Section V D. Unresolved Issues.
7. The Applicant will update the FEIS to include the terms drinking water and non-drinking water.

The Applicant is aware that the outstanding issues pointed out in the July 6, 2012, comment letter on the Petition are still valid and need to be addressed before the Petition is deemed a proper filing and accepted for processing in accordance with section 15-15-50(f), HAR.

Thank you again for providing us with your response. Please feel free to call Mrs. Jennifer Maydan, AICP or Mr. Brett Davis at (808) 242-1955 should you have any questions.

Sincerely yours,



Jordan Hart
President

ENCLOSURES

CC. Mr. Steve Perkins, Pacific Rim Land, Inc.
Project File 08-132



**CHRIS
HART**
& PARTNERS, INC.

Landscape Architecture
City & Regional Planning

March 1, 2013

Mr. Daniel E. Orodener, Director
Land Use Commission
State of Hawaii, DBEDT
235 South Beretania Street, Suite 406
Honolulu, HI 96813

Dear Mr. Orodener,

RE: Comments on the Draft Environmental Impact Statement for the Proposed Maui Research and Technology Park Master Plan update, located in Kihei, Maui, Hawaii at TMK's: (2) 2-2-024:1-9,14-18,31,32, 34, 36, and 37 and (2) 2-2-02:054 (por.)

Thank you for your letter of July 30, 2012; this letter supersedes the response letter dated January 30, 2013 to conform to HAR §11-200-22(c)(2) Review of Environmental Impact Statements, *"Response letters reproduced in the text of the final EIS shall indicate verbatim changes that have been made to the text of the draft EIS."*

I am pleased to provide the following responses which are presented in the same order as your numerated comments:

1. In response to comment 1. The following language is in the final EIS and can be found in Section II. H.

In response to comments from DBEDT LUC, an incremental development plan was prepared. See: Appendix P "Incremental Development Plan". The Master Plan Update will be implemented in two phases; with key infrastructure improvements tied to the phase of development and as the improvements are warranted. Figure 23, "Development Phasing Plan", identifies the phases, and sub-phases of the implementation program. Table No. 3, "Development Program Phasing", identifies the development program with a preliminary list of off-site improvement requirements.

Table 3, Development Program Phasing

| PHASE ONE | | |
|---------------------------|-------------------------------|---|
| | <u>Acres</u> | |
| Net Developable Land | 118.8 | 60.3% <u>62.8%</u> |
| Parks & Open Space | 32.1 <u>32.2</u> | 16.2% <u>17.2%</u> 23.4% |
| Road Rights-of-Way | 46.055 <u>38.1</u> | 20% <u>20%</u> |
| Total Land Area | <u>196.96</u> | 100.0% |
| Employment BUA (New) | 783,200 | Square Feet |
| Employment BUA (Total) | 963,200 | Square Feet |
| Other Non-Residential BUA | <u>202,000</u> | Square Feet |
| Total BUA | 1,165,200 | Feet |
| Dwelling Units | 750 | |
| PHASE TWO | | |
| | <u>Acres</u> | |
| Net Developable Land | 123.7 | 57.0% <u>58.4%</u> |
| Parks & Open Space | 56.7 <u>56.6</u> | 26.1% <u>26.7%</u> 17.0% |
| Road Rights-of-Way | 36.8 <u>31.6</u> | 14.9% <u>14.9%</u> |
| Total Land Area | <u>217.2</u> | 100.0% |
| Employment BUA (New) | 981,600 | Square Feet |
| Employment BUA (Total) | 981,600 | Square Feet |
| Other Non-Residential BUA | <u>33,200</u> | Square Feet |
| Total BUA | 1,014,800 | Feet |
| Dwelling Units | 500 | |

2. In response to comment 2. The following language is in the final EIS and can be found in Section II. C.

In response to comments from the State Land Use Commission and State Office of Planning the following is a historical timeline of Land Use entitlement events for the MRTTP:

- On November 9, 1984, Maui Economic Development Board, Inc. filed its Petition for District Boundary Amendment with the Land Use Commission, State of Hawaii ("LUC") to reclassify approximately 300 acres of land in Kihei, Maui from the agricultural district to the urban district to develop a high technology park in LUC Docket No. A84-585.
- On July 15, 1985, the LUC issued its Findings of Fact, Conclusions of Law and Decision and Order ("D&O"). The southern half of the petition area, comprising of approximately 150 acres, was reclassified to the urban district and the northern half of the petition area was approved for incremental districting.
- Figure 1-3 shows the current proposed project and identifies five areas identified as Areas A, B, C, D and E.
- Figure 1-4 depicts the LUC's ruling in its July 15, 1985 D&O by showing the urban district lands in the hatched area and the lands approved for incremental districting in the cross hatched area, as superimposed upon Areas A, B, C, D and a 20 acre area south of Area B.
- On September 11, 1985, Maui Economic Development Board, Inc. filed its Motion to Modify Petition and to Classify Approximately 300 Acres of Land Currently in the Agricultural District into the Urban District at Kihei, Maui, Hawaii ("Motion to Modify"). The Motion to Modify requested that approximately 111 acres of urban land be relocated to the northern half, keeping approximately 39 acres remaining in the urban district.
- On February 25, 1986, the LUC issued its Amended Findings of Fact, Conclusions of Law and Decision and Order ("Amended D&O") approving the Motion to Modify. Figure 1-5 depicts the LUC's ruling in its February 25, 1986 Amended D&O by showing the urban district lands in Areas A and C as hatched, and the lands approved for incremental districting in Areas B and D as cross hatched.

- On November 20, 2007, Maui R&T Partners, LLC ("MRTP") acquired a fee simple interest in the Petition Area. MRTP has since taken over the management of the Project as well as developing the new master plan for the Project.
- On June 23, 2010, MRTP filed its Petition for District Boundary Amendment in LUC Docket No. A10-787, for the reclassification of approximately 253.05 acres from the agricultural district to the urban district ("Petition"), comprised of Areas B, D and E on Figure 1-3. The Petition proposes a redesigned Project to implement a new sustainable community based on mixed uses that will allow for people to work, live and play within or near the Project.

To reconcile the differences in the prior project with the current Project, MRTP will also be filing a motion to amend the Amended D&O to allow for the additional mixed uses in Area C. The intent is for the motion to amend to be filed in time so that the hearings in both LUC dockets may be consolidated so that the entire new Project may be considered at the same time, where Areas A and C will be subject to LUC Docket No. A84-585 and Areas B, D and E will be subject to LUC Docket No. A10-787

3. In response to comment 3a. The following language is in the final EIS and can be found in Section II. H.

The total cost estimate for off-site and onsite infrastructure improvements for increment 1 is approximately \$77.5 million dollars and increment 2 is approximately \$85.3 million dollars, totaling over \$162.8 million dollars in off-site and on-site construction cost for increments 1 and 2. A full detailed cost summary is in See: Appendix P "Incremental Development Plan".

In response to comment 3b. The following language is in the final EIS and can be found in Section III. B.2.

In response to comments from the DBEDT LUC, the estimated price ranges of proposed multi-family units will range from \$280,000 to \$400,000, townhomes will range in price from \$400,000 to \$560,000 and single family homes will range in price from \$640,000 to \$1,000,000. A detailed analysis is provided in Appendix S, Affordable Housing Assessment).

4. In response to comment 4a. The following language is in the final EIS and can be found in Section II. F.5.

In accordance with priority guidelines and principles to promote sustainability under section 226-108 and in response to comments from DBEDT LUC and State Office of Planning a Sustainability Plan was prepared. (See: Appendix N, "Sustainability Study") When applying these principles to the MRTP some major elements are outside the control of the master plan. For instance the Parks location across from Piilani Highway makes non motorized transportation difficult. However adding housing and commercial and retail activities to the MRTP creates a mix of activities which will create a more complete community and allow people to meet all of their needs in the area. The MRTP has the opportunity to showcase workers and residents enjoying a diversity of housing, transit connectivity and quality economic development from this community.

Conservation and Restoration

Design of the MRTP will respect the existing topography and other natural features, and is therefore less damaging to construct and preserves natural systems. The MRTP will incorporate a compact designed roadway network with bicycle and pedestrian pathways to reduce automobile use. The MRTP will use recycled water when applicable including fire control, landscaping and toilets. It is estimated that 170 million gallons of water per year could be diverted away from injection wells. Approximately 300 kilowatts of photovoltaic power is used at the MRTP with another 200 kilowatts planned. The master developer will encourage the use of as much renewable energy and distribution generation as the utility will allow. The use of drought tolerant native plants will be encouraged.

Diversity and Balance

The MRTP Master Plan provides a diversity of uses, far different than typical single-use development. The MRTP will provide residential opportunities within walking distance of commercial development to reduce commuting distances and make walking and bicycling more convenient. Residential neighborhoods will offer a diversity of housing types within a short walk of the mixed use center, and The Park's increased balance of employment and residential will help alleviate problems of commuting to work.

Human and Pedestrian Scale

The MRTTP will provide a variety of activities and land uses available within a reasonable walking and bicycling distance creates an area scaled to people, not automobiles. The plan proposes streets with bike lanes and sidewalks for slow automobile traffic and nearby buildings, creating a kind of outdoor room for which will be comfortable, safe and inviting for pedestrians. Pedestrian safety measures include street parking, narrow streets, traffic calming measures, and sidewalks throughout the MRTTP to promote less reliance on the automobile.

Connections and Interdependence

The MRTTP will be accessible from Piilani Highway via the existing Lipoa Parkway. The Park will develop an internal roadway network that will connect the MRTTP to the Piilani Highway and to surrounding developments as necessary. The MRTTP will also include sidewalks and bicycle pathways to improve the efficiency and effectiveness of the transit system. As the MRTTP gains employment and population, transit service will become more viable as well as more essential. The Park has been planned to work with a future transit system.

In response to comment 4b. The following language is in the final EIS and can be found in Table 1.

| <u>Table 1 Required Permits and Approvals</u> | | |
|---|----------------------------------|------------------------------------|
| <u>Permit / Approval Required</u> | <u>Responsible Authority</u> | <u>Projected Submittal Date</u> |
| <u>HRS Chapter 343 Compliance</u> | <u>State Land Use Commission</u> | <u>March 2013</u> |
| <u>Final Environmental Impact Statement (EIS)</u> | <u>State Land Use Commission</u> | <u>April 2013</u> |
| <u>State Land Use District Boundary Amendment (DBA)</u> | <u>State Land Use Commission</u> | <u>June 2010, updated May 2013</u> |
| <u>Community Plan Amendment (CPA)</u> | <u>Maui County Council</u> | <u>January/February 2014</u> |

| | | |
|---|---|--|
| <u>Change in Zoning (CIZ)</u> | <u>Maui County Council</u> | <u>January/February 2014</u> |
| <u>Driveway Permit</u> | <u>Maui County, Public Works, Development Services Division</u> | <u>2014. These permits will be applied for in conjunction with construction of the next commercial building in the MRTP project area.</u> |
| <u>Building Permit</u> | <u>Maui County, Public Works, Development Services Division</u> | |
| <u>Wastewater Discharge (Hookup) Permit</u> | <u>Maui County, Department of Environmental Management, Wastewater Division</u> | |
| <u>Well Construction and Pump Installation Permit</u> | <u>State of Hawaii, DLNR-CWRM</u> | <u>2014. These permits will be applied for in conjunction with development of the project well water source.</u> |
| <u>Grading and Grubbing Permit</u> | <u>Maui County, Public Works, Development Services Division</u> | <u>2015. These permits will be applied for in conjunction with construction of the water treatment plant, storage tank and transmission line components of the Increment 1 potable water system.</u> |
| <u>NPDES Permit</u> | <u>State of Hawaii, DOH</u> | |
| <u>Air Pollution Control Permit</u> | <u>State of Hawaii, DOH</u> | |
| <u>Community Noise Permit</u> | <u>State of Hawaii, DOH</u> | |
| <u>Section 404 Clean Water Act Approval</u> | <u>Department of the Army</u> | |
| <u>Section 401 Clean Water Act</u> | <u>State of Hawaii, DOH</u> | <u>2015. These permits will be applied for in conjunction with the construction of the Makai Residential Area drainage basin's discharge outlet into Waipuilani Gulch.</u> |
| <u>Stream Channel Alternation Permit</u> | <u>State of Hawaii, DLNR-CWRM</u> | |

| | | |
|--|---|--|
| <u>Preliminary Subdivision Approval</u> | <u>Maui County, Public Works, Development Services Division</u> | <u>2015. These approvals will be sought in conjunction with the first commercial or residential subdivision application filed to facilitate development under the new MRTP Master Plan</u> |
| <u>Easements for Utilities and Roadways</u> | <u>Various</u> | |
| <u>Drainage Approval</u> | <u>Maui Department of Public Works, Engineering Division</u> | |
| <u>Final Subdivision Approval</u> | <u>Maui County, Public Works, Development Services Division</u> | |
| <u>Permit to Perform Work Within the State ROW</u> | <u>State of Hawaii, DOT</u> | <u>2016. This permit will be applied for in conjunction with construction of the Piilani Highway / Lipoa Parkway intersection improvements</u> |

5. In response to comment 5. The following language is in the final EIS and can be found in Section III. C6 Civil Defense.

In response to comments from DBEDT LUC, and Civil Defense the Applicant will take into consideration your recommendation to incorporate hardening measures for safe rooms within planned residential facilities and community facilities so as to withstand high-wind and seismic events. Additionally, as requested in your letter, the Applicant will install one (1) Omni 121 db(c) directional siren on the northeast section of the Maui Research and Technology Park. (See: Table 28).

6. In response to comment 6. The following language is in the final EIS and can be found in Section I. H. Unresolved Issues and Section V.D. Unresolved Issues.

Table 1-1 Unresolved Issues

| <u>Issue</u> | <u>Parties Involved</u> | <u>Estimated Resolution</u> |
|------------------------------------|--|-----------------------------|
| <u>Boundary Amendment Petition</u> | <u>MRTP, LUC, Office of State Planning</u> | <u>2013</u> |
| <u>Docket No. A84-585)</u> | | |
| <u>New Zoning</u> | <u>MRTP, County of Maui</u> | <u>2013</u> |

| | |
|-----------------------|--|
| <u>Ordinance</u> | <u>Department of Planning, Maui Planning Commission and Maui County Council.</u> |
| <u>Drinking Water</u> | <u>MRTP, County of Maui DWS 2014</u> |
| <u>Mauka Roadway</u> | <u>MRTP, County of Maui, 2015 DPW, DP, DOT. State of Hawaii DOT.</u> |

Boundary Amendment Petition Docket No. A84-585

On November 9, 1984, Maui Economic Development Board, Inc. filed its Petition for District Boundary Amendment with the Land Use Commission, State of Hawaii ("LUC") to reclassify approximately 300 acres of land in Kihei, Maui from the agricultural district to the urban district to develop a high technology park in LUC Docket No. A84-585. The Applicant will request amendment to Docket No. A84-585 in order to make the project description consistent with the new Master Plan update.

Potable Drinking Water Source.

As documented in Section III.D.4 of the DEIS, the MRTP is currently served by the County of Maui public drinking water system and continued use of the public drinking water system is the preferred choice for the MRTP. However, MCC Chapter 14.12 requires that a long-term and reliable supply of drinking water be available prior to subdivision approval. According to MCC Section 14.01.040 a long-term and reliable source of drinking water is determined by the issuance of a County water meter reservation or verification that a privately developed source will meet the needs of the proposed development. Since the County will not issue water meter reservations until the issuance of building permits, which requires subdivision approval, the Project can not demonstrate that County drinking water will be available. Therefore, the MRTP will pursue development of a private on- or off-site water system. However, the MRTP will continue to work with the County to determine if County water can be committed to the project in lieu of a privately developed source (See: Section III.D.4).

Mauka North-South Collector Road

As described in Section III.D.1 of the FEIS, planned and projected growth in Kihei-Makena to 2034, without Phase II of the Project, will trigger the need for a new north-south collector roadway mauka of Piilani Highway that intersects with the planned Mokulele Highway, crosses the planned Upcountry Highway and intersects with Piilani highway south of MRTP. The schedule for development of this roadway, appropriate cost sharing and funding sources are uncertain at this time. These issues will be resolved as the need for the roadway becomes more imminent.

Amendments to Maui County Code (MCC) Chapter 19.33

Implementation of the Master Plan will require amendments to MCC Chapter 19.33. These amendments will relate to the types of uses permitted in the Park, density of development, building massing, parking requirements, etc. It is not yet known whether these amendments will be adopted through the legislative process. Should the amendments not be adopted, or be revised significantly, then the ultimate mix of land uses and character of development may be affected.

7. In response to comment 7. The Applicant has updated the FEIS to include the terms drinking water and non-drinking water throughout the Final EIS.

Finally, the Applicant is aware that the outstanding issues pointed out in the July 6, 2012, comment letter on the Petition are still valid and need to be addressed before the Petition is deemed a proper filing and accepted for processing in accordance with section 15-15-50(f), HAR.

Mr. Daniel Orodener, Director
Comment Response Letter
March 1, 2013
Page 11 of 11

Thank you again for providing us with your response. Please feel free to call Mrs. Jennifer Maydan, AICP or Mr. Brett Davis at (808) 242-1955 should you have any questions.

Sincerely yours,



Jordan Hart
President

ENCLOSURES

CC. Mr. Steve Perkins, Pacific Rim Land, Inc.
Project File 08-132

NEIL ABERCROMBIE
Governor



DANIEL E. ORODENKER
Executive Officer

LAND USE COMMISSION
Department of Business, Economic Development & Tourism
State of Hawai'i

July 30, 2012

RECEIVED

AUG - 1 2012

Mr. Steve Perkins
Maui R&T Partners, LLC
1300 North Holopono, Suite 201
Kihei, Hawaii 96753

CHRIS HART & PARTNERS, INC.
Landscape Architecture and Planning
CH: MCH 08 11 12

Dear Mr. Perkins:

Subject: Draft Environmental Impact Statement (DEIS)
Maui Research & Technology Park Master Plan Update
Kihei, Maui, Hawai'i
Tax Map Keys: 2-2-24: 1-9, 14-18, 31, 32, 34, 36, and 37 and 2-2-02:
por. 54

We have reviewed the DEIS for the subject project and have the following comments to offer:

- 1) In accordance with section 11-200-17(e)(5), Hawaii Administrative Rules (HAR), the phasing and timing of the action should be provided as part of the project description. We acknowledge the discussion on the development phasing. However, we request that additional detail be provided to indicate the year(s) in which specific components of the project within the Petition Area as well as the overall technology park area are anticipated to commence and be completed.
- 2) In accordance with section 11-200-17(e)(7), HAR, a historic perspective should be provided as part of the project description. We acknowledge that there is some discussion on the past events leading up to the Master Plan Update. As we pointed out in our July 6, 2010, comment letter on the Petition for District Boundary Amendment (Petition), the Petition Area includes lands that are

subject to incremental districting for a research and technology park pursuant to Docket No. A84-585/Maui Economic Development Board, Inc., and that there was no application filed for redistricting of these lands, identified as the new Second Increment, due to the slow pace of development. Please include a discussion on this historical context as it has a direct bearing on the use of these lands.

- 3) In accordance with section 11-200-17(e), HAR, a description of the development should be provided. We acknowledge that the DEIS includes such a description; however, there is no information on the estimated cost of the development. We request that information on the cost of the offsite and onsite infrastructure as well as the construction costs of the individual components of the project be provided. Such costs should differentiate between the development planned within the Petition Area and the overall technology park area.

In addition, we request that the *estimated* price ranges of the proposed single and multi-family units, including the affordable units, be provided. Please be advised that section 15-15-50(c)(7), HAR, requires, among other things, that the selling prices of the lots/units be included as part of the Petition.

- 4) In accordance with section 11-200-17(h), HAR, a statement of the relationship of the proposed action to land use plans, policies, and controls for the affected area should be provided. We acknowledge that the DEIS includes an assessment of the project in relation to the applicable goals, objectives, and policies of the State Plan, including the priority guidelines. Please also include an analysis of the project in relation to the priority guidelines and principles to promote sustainability under section 226-108 that were incorporated as SB283, SD1, HD1, CD1, and signed into law as Act 181, SLH 2011.

In accordance with the above section, the status of each identified approval should also be described. We acknowledge that the DEIS includes a listing of anticipated permits and approvals. We request that to the extent possible the *projected* submittal dates (i.e., by

month/year) of the various applications to the responsible agencies be provided.

- 5) In accordance with section 11-200-17(i), HAR, the DEIS should include a statement of the probable impact of the proposed action on the environment, and impacts of the natural or human environment on the project, which shall include consideration of all phases of the action and consideration of all consequences on the environment; direct and indirect effects shall be included. We note that there is no discussion in the DEIS on the existing civil defense facilities in the area and on the potential impacts on such facilities from the project. We request that the Final EIS address this matter, including any plan to fund and construct adequate civil defense measures (sirens) to serve the Petition Area as may be required by the State Department of Defense, Office of Civil Defense.
- 6) In accordance with section 11-200-17(n), HAR, the DEIS shall include a separate and distinct section that summarizes unresolved issues. We acknowledge that the DEIS includes such a section. However, we request that this section include a timetable for resolution of the issue, a description of the applicable agencies that would be integral to such resolution, and the options available to the Petitioner/project if the issues are not resolved in a timely manner relative to the commencement of the project.

Please also include the matter of the preceding boundary amendment petition filed under Docket No. A84-585/Maui Economic Development Board, Inc., as an unresolved issue. Until such time that this matter is properly resolved, we believe that it should be identified as an outstanding land use entitlement issue.

- 7) In the DEIS, there are numerous references to the term *potable water* and *non-potable water*. We request that they be replaced by the terms *drinking water* and *non-drinking water*, respectively. We have been advised that although potable water has generally been used to mean drinking water, the State Department of Health (DOH) uses the latter term specifically to indicate water for human consumption that is derived from surface water and/or

Mr. Steve Perkins
July 30, 2012
Page 4

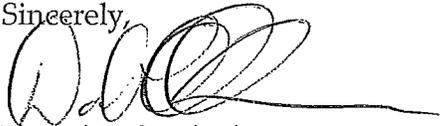
groundwater and is regulated by the DOH pursuant to chapter 11-20, HAR.

Finally, we would like to remind the Petitioner of the outstanding issues pointed out in our July 6, 2010, comment letter on the Petition. Those matters will need to be addressed before the Petition is deemed a proper filing and accepted for processing in accordance with section 15-15-50(f), HAR.

We have no further comments to offer at this time. Thank you for the opportunity to comment on the subject DEIS.

Should you have any questions, please feel free to call Bert Saruwatari of our office at 587-3822.

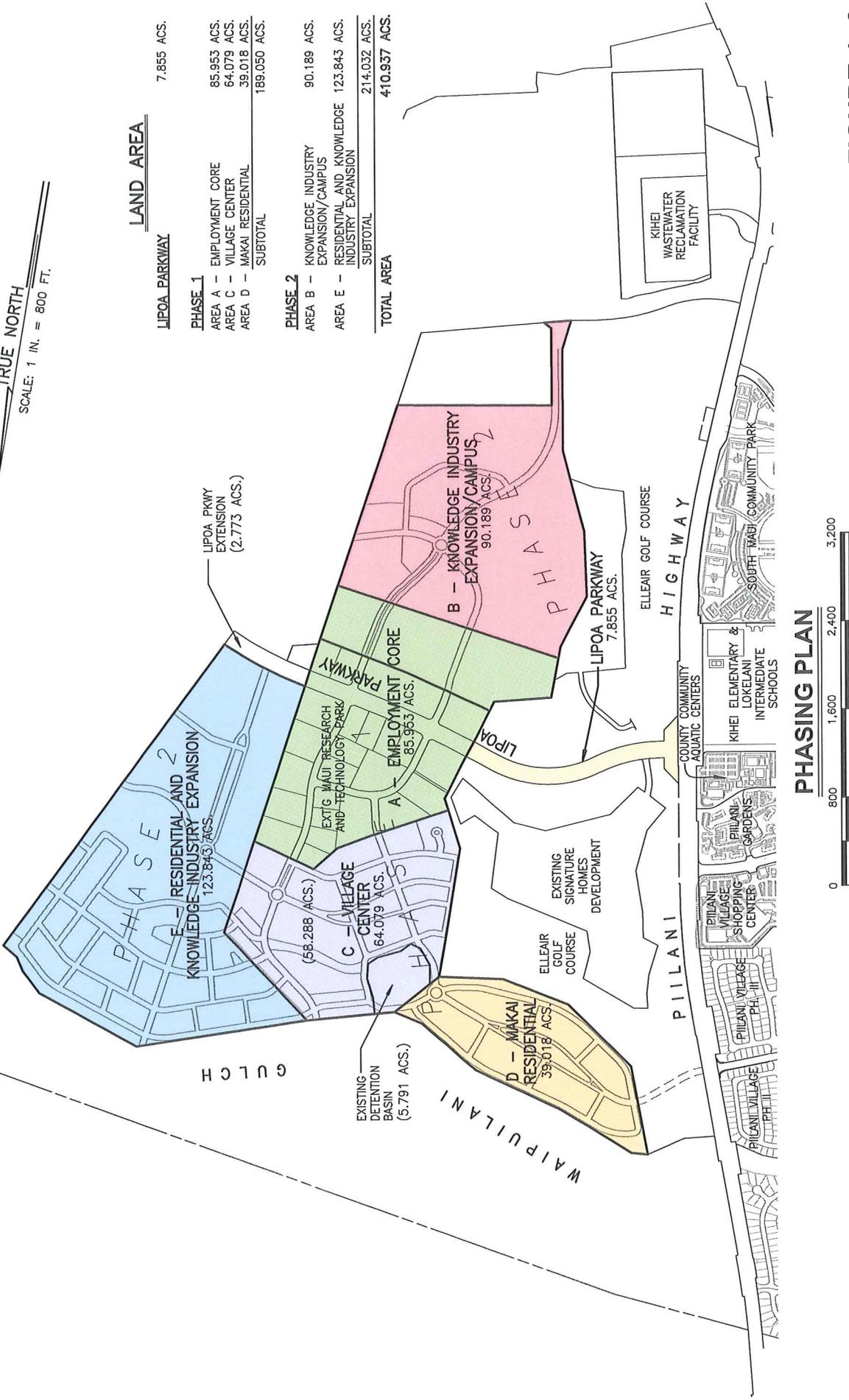
Sincerely,

A handwritten signature in black ink, appearing to read 'D. Orodener', with a long horizontal flourish extending to the right.

Daniel E. Orodener
Executive Officer

c: Michael Summers

TRUE NORTH
SCALE: 1 IN. = 800 FT.



LAND AREA

| | |
|---|---------------------|
| LIPOA PARKWAY | 7.855 ACS. |
| PHASE 1 | |
| AREA A - EMPLOYMENT CORE | 85,953 ACS. |
| AREA C - VILLAGE CENTER | 64,079 ACS. |
| AREA D - MAKAI RESIDENTIAL | 39,018 ACS. |
| SUBTOTAL | 189,050 ACS. |
| PHASE 2 | |
| AREA B - KNOWLEDGE INDUSTRY EXPANSION/CAMPUS | 90,189 ACS. |
| AREA E - RESIDENTIAL AND KNOWLEDGE INDUSTRY EXPANSION | 123,843 ACS. |
| SUBTOTAL | 214,032 ACS. |
| TOTAL AREA | 410,937 ACS. |

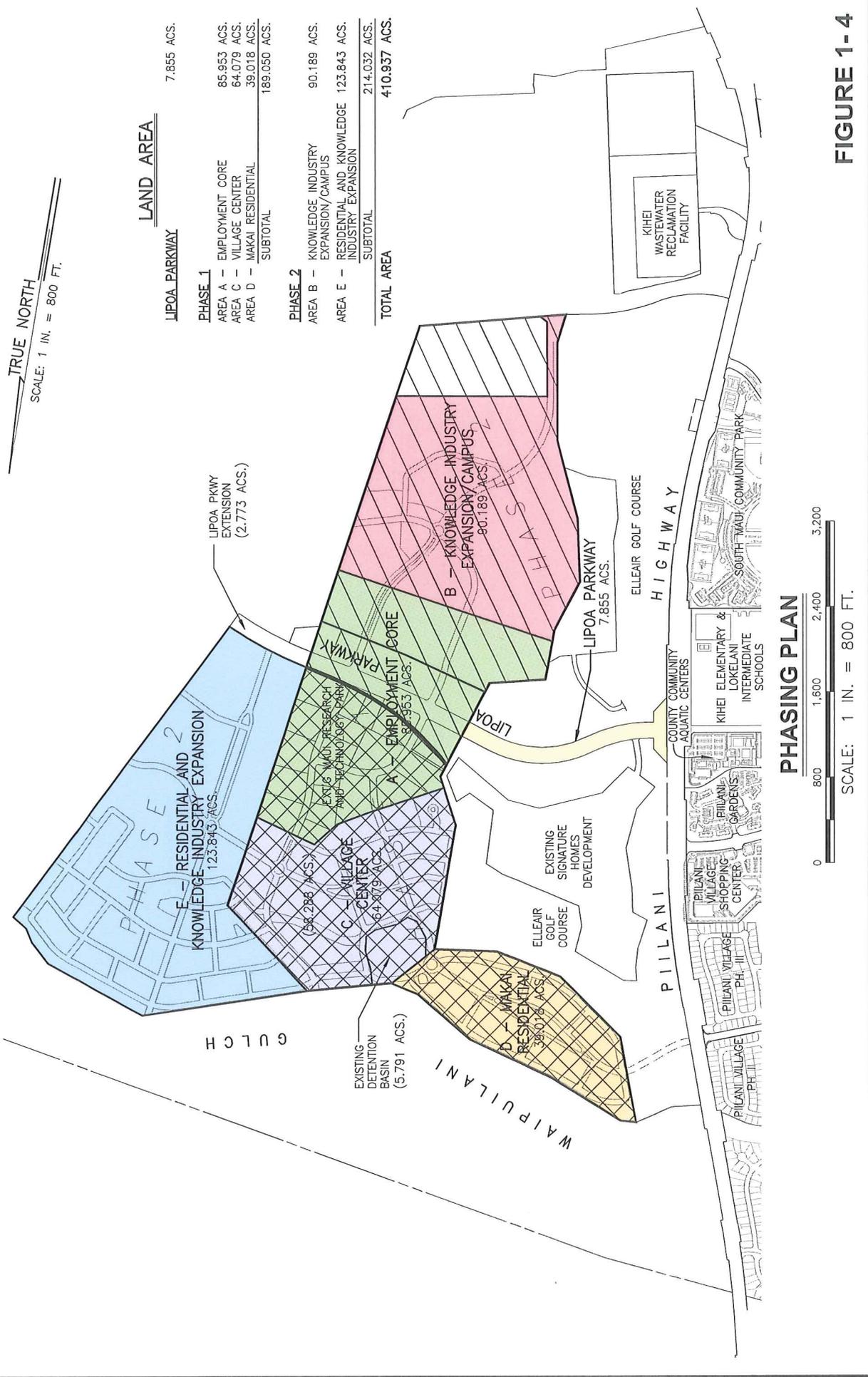
PHASING PLAN



SCALE: 1 IN. = 800 FT.

FIGURE 1-3

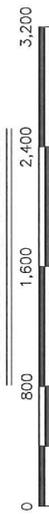
TRUE NORTH
SCALE: 1 IN. = 800 FT.



LAND AREA

| LIPOA PARKWAY | | 7,855 ACS. |
|---|--|---------------------|
| PHASE 1 | | |
| AREA A - EMPLOYMENT CORE | | 85,953 ACS. |
| AREA C - VILLAGE CENTER | | 64,079 ACS. |
| AREA D - MAKAI RESIDENTIAL | | 39,018 ACS. |
| SUBTOTAL | | 189,050 ACS. |
| PHASE 2 | | |
| AREA B - KNOWLEDGE INDUSTRY EXPANSION/CAMPUS | | 90,189 ACS. |
| AREA E - RESIDENTIAL AND KNOWLEDGE INDUSTRY EXPANSION | | 123,843 ACS. |
| SUBTOTAL | | 214,032 ACS. |
| TOTAL AREA | | 410,937 ACS. |

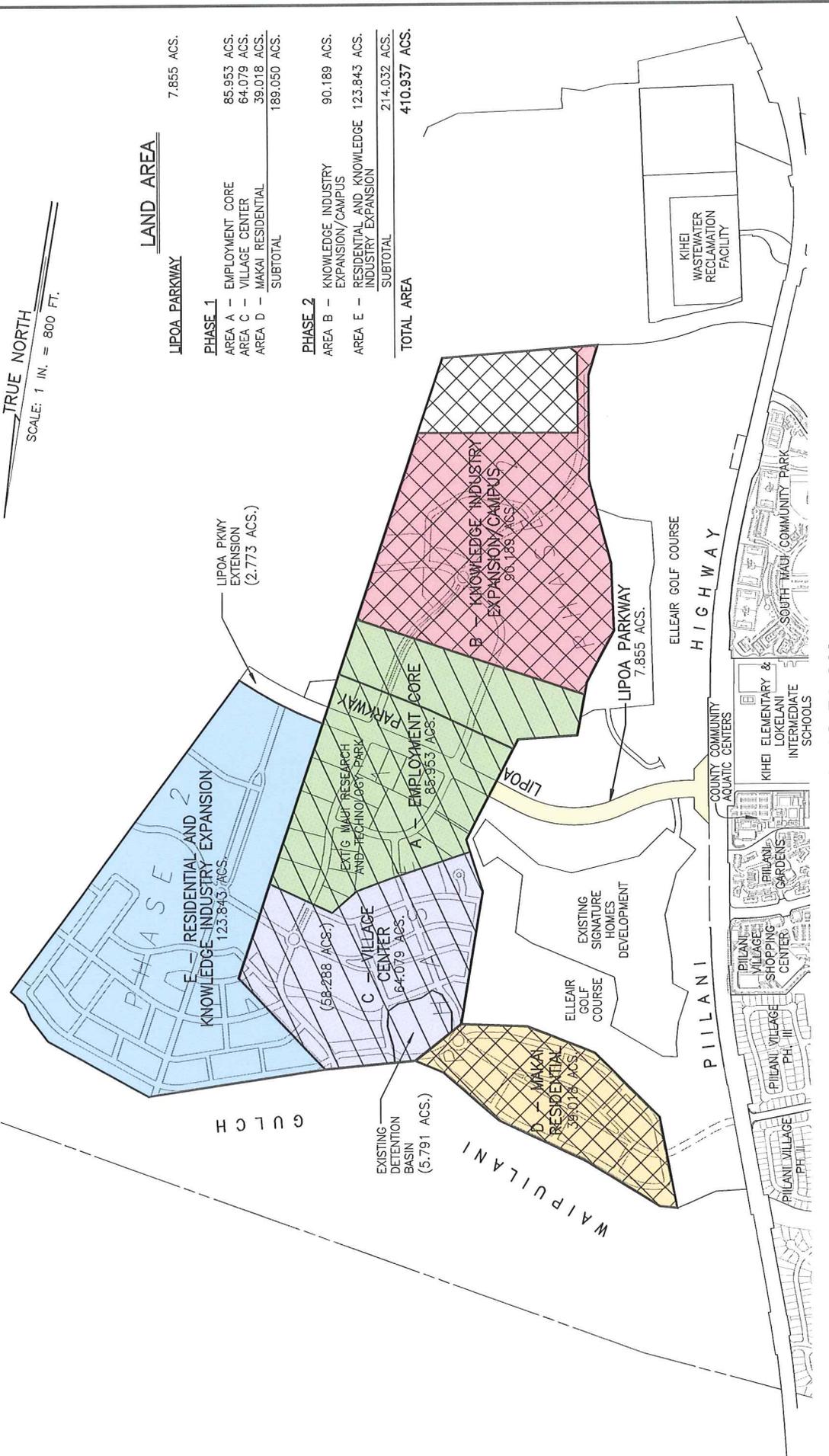
PHASING PLAN



SCALE: 1 IN. = 800 FT.

FIGURE 1-4

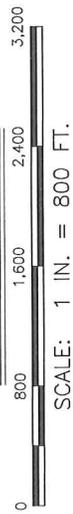
TRUE NORTH
SCALE: 1 IN. = 800 FT.



LAND AREA

| | |
|---|---------------------|
| LIPOA PARKWAY | 7,855 ACS. |
| PHASE 1 | |
| AREA A - EMPLOYMENT CORE | 85,953 ACS. |
| AREA C - VILLAGE CENTER | 64,079 ACS. |
| AREA D - MAKAI RESIDENTIAL | 39,018 ACS. |
| SUBTOTAL | 189,050 ACS. |
| PHASE 2 | |
| AREA B - KNOWLEDGE INDUSTRY EXPANSION/CAMPUS | 90,189 ACS. |
| AREA E - RESIDENTIAL AND KNOWLEDGE INDUSTRY EXPANSION | 123,843 ACS. |
| SUBTOTAL | 214,032 ACS. |
| TOTAL AREA | 410,937 ACS. |

PHASING PLAN



SCALE: 1 IN. = 800 FT.

FIGURE 1-5

**MAUI RESEARCH & TECHNOLOGY PARK
Order-Of-Magnitude Construction Cost Summary**

November 21, 2011

| Description | Total |
|--|---------------|
| INCREMENT 1 | |
| <u>Petition Area</u> | |
| Sewer System | \$ 1,316,000 |
| Potable Water System | \$ 2,509,000 |
| Non-Potable Water System | \$ 514,000 |
| Roadway Improvements | \$ 10,991,000 |
| Drainage System | \$ 5,512,500 |
| Building Site Mass Earthwork | \$ 590,000 |
| Subtotal - Petition Area: \$ 21,432,500 | |
| <u>Non-Petition Area</u> | |
| Sewer System | \$ 1,732,000 |
| Potable Water System | \$ 3,373,000 |
| Non-Potable Water System | \$ 1,027,500 |
| Roadway Improvements | \$ 21,215,300 |
| Drainage System | \$ 7,154,000 |
| Building Site Mass Earthwork | \$ 3,160,000 |
| Subtotal - Non-Petition Area: \$ 37,661,800 | |
| <u>Offsite Improvements</u> | |
| Potable Water System | \$ 12,490,000 |
| Non-Potable Water System | \$ 2,880,000 |
| Roadway Improvements | \$ 3,045,000 |
| Subtotal - Offsite Improvements: \$ 18,415,000 | |
| Subtotal - Increment 1: \$ 77,509,300.00 | |

Note: See Schedule A for Detailed Breakdown

| Description | Total |
|------------------------------------|-----------------------|
| INCREMENT 2 | |
| <u>Petition Area</u> | |
| Sewer System | \$ 3,795,000 |
| Potable Water System | \$ 4,515,000 |
| Non-Potable Water System | \$ 1,575,500 |
| Roadway Improvements | \$ 32,320,600 |
| Drainage System | \$ 20,796,000 |
| Building Site Mass Earthwork | \$ 10,370,000 |
| <hr/> | |
| Subtotal - Petition Area: | \$ 73,372,100 |
| | |
| <u>Non-Petition Area</u> | |
| Sewer System | \$ 165,000 |
| Potable Water System | \$ 858,500 |
| Non-Potable Water System | \$ 71,500 |
| Roadway Improvements | \$ 1,615,700 |
| Drainage System | \$ 1,887,000 |
| Building Site Mass Earthwork | \$ 1,185,000 |
| <hr/> | |
| Subtotal - Non-Petition Area: | \$ 5,782,700 |
| | |
| <u>Offsite Improvements</u> | |
| Potable Water System | \$ 6,170,000 |
| <hr/> | |
| Subtotal - Offsite Improvements: | \$ 6,170,000 |
| <hr/> | |
| Subtotal - Increment 2: | \$ 85,324,800 |
| <hr/> | |
| TOTAL - INCREMENTS 1 AND 2: | \$ 162,834,100 |
| 20% Contingency: | \$ 32,566,820 |
| <hr/> | |
| TOTAL CONSTRUCTION COST: | \$ 195,400,920 |

SCHEDULE A

**MAUI RESEARCH & TECHNOLOGY PARK
Construction Cost Breakdown**

November 21, 2012

| Description | Approx. Quan. | Unit | Unit Price | Total |
|--|------------------|------|---------------|---------------|
| INCREMENT 1 | | | | |
| <u>Petition Area</u> | | | | |
| Sewer System | | | | |
| 6" Sewer Force Main | 2,200 | L.F. | \$ 80 | \$ 176,000 |
| 8" Gravity Sewerline with Manholes | 6,600 | L.F. | \$ 150 | \$ 990,000 |
| Sewer Lift Station | 1 | EA. | \$ 150,000 | \$ 150,000 |
| Subtotal - Sewer System: | | | | \$ 1,316,000 |
| Potable Water System | | | | |
| 12" Waterline & Fittings | 7,600 | L.F. | \$ 130 | \$ 988,000 |
| Pressure Reducing Valve Assembly | 1 | EA. | \$ 40,000 | \$ 40,000 |
| Residential (SF) Service Lateral | 350 | EA. | \$ 4,000 | \$ 1,400,000 |
| Fire Hydrant | 30 | EA. | \$ 2,700 | \$ 81,000 |
| Subtotal - Potable Water System: | | | | \$ 2,509,000 |
| Non-Potable Water System | | | | |
| 6" Irrigation Waterline & Fittings | 7,600 | L.F. | \$ 65 | \$ 494,000 |
| Pressure Reducing Valve Assembly | 1 | EA. | \$ 20,000 | \$ 20,000 |
| Subtotal - Non-Potable Water System: | | | | \$ 514,000 |
| Roadway Improvements | | | | |
| Roundabout | 2 | EA. | \$ 600,000 | \$ 1,200,000 |
| Local Street (Type E) ¹ | 6,900 | L.F. | \$ 890 | \$ 6,141,000 |
| Split Connector (Type D) ¹ | 2,400 | L.F. | \$ 712 | \$ 1,708,800 |
| Connector Street (Type C) ¹ | 1,100 | L.F. | \$ 1,242 | \$ 1,366,200 |
| Roads - Embankment | 55,000 | C.Y. | \$ 5 | \$ 275,000 |
| Roads - Excavation | 25,000 | C.Y. | \$ 12 | \$ 300,000 |
| Subtotal - Roadway Improvements: | | | | \$ 10,991,000 |

¹ See Schedule B for Detailed Breakdown

| Description | Approx. Quan. | Unit | Unit Price | Total |
|--|---------------|------|------------|--------------|
| INCREMENT 1 | | | | |
| <u>Petition Area</u> | | | | |
| Drainage System | | | | |
| Trunk Drainline | 500 | L.F. | \$ 825 | \$ 412,500 |
| Drainline with Manholes and Catch Basins | 10,000 | L.F. | \$ 420 | \$ 4,200,000 |
| Drainage Detention Basin | 2 | EA. | \$ 300,000 | \$ 600,000 |
| Waipuilani Levee | 300 | L.F. | \$ 1,000 | \$ 300,000 |
| Subtotal - Drainage System: | | | | \$ 5,512,500 |
| Building Site Mass Earthwork | | | | |
| Lots - Embankment | 10,000 | C.Y. | \$ 5 | \$ 50,000 |
| Lots - Excavation | 45,000 | C.Y. | \$ 12 | \$ 540,000 |
| Subtotal - Building Site Mass Earthwork: | | | | \$ 590,000 |
| <u>Non-Petition Area</u> | | | | |
| Sewer System | | | | |
| 6" Sewer Force Main | 1,400 | L.F. | \$ 80 | \$ 112,000 |
| 8" Gravity Sewerline with Manholes | 10,700 | L.F. | \$ 150 | \$ 1,605,000 |
| Sewer Transition Manhole | 1 | EA. | \$ 15,000 | \$ 15,000 |
| Subtotal - Sewer System: | | | | \$ 1,732,000 |
| Potable Water System | | | | |
| 12" Waterline & Fittings | 13,900 | L.F. | \$ 130 | \$ 1,807,000 |
| 16" Waterline & Fittings | 600 | L.F. | \$ 160 | \$ 96,000 |
| Residential (SF) Service Lateral | 100 | EA. | \$ 4,000 | \$ 400,000 |
| Residential (MF) Service Lateral | 40 | EA. | \$ 8,500 | \$ 340,000 |
| Commercial Service Lateral | 70 | EA. | \$ 8,500 | \$ 595,000 |
| Fire Hydrant | 50 | EA. | \$ 2,700 | \$ 135,000 |
| Subtotal - Potable Water System: | | | | \$ 3,373,000 |

| Description | Approx. Quan. | Unit | Unit Price | Total |
|---|---------------|------|------------|---------------|
| INCREMENT 1 | | | | |
| <u>Non-Petition Area</u> | | | | |
| Non-Potable Water System | | | | |
| 6" Irrigation Waterline & Fittings | 6,900 | L.F. | \$ 65 | \$ 448,500 |
| 8" Irrigation Waterline & Fittings | 1,600 | L.F. | \$ 90 | \$ 144,000 |
| 14" Irrigation Waterline & Fittings | 3,000 | L.F. | \$ 145 | \$ 435,000 |
| Subtotal - Non-Potable Water System: | | | | \$ 1,027,500 |
| Roadway Improvements | | | | |
| Roundabout | 2 | EA. | \$ 600,000 | \$ 1,200,000 |
| Local Street (Type E) ¹ | 6,800 | L.F. | \$ 890 | \$ 6,052,000 |
| Split Connector (Type D) ¹ | 1,400 | L.F. | \$ 712 | \$ 996,800 |
| Connector Street (Type C) ¹ | 4,900 | L.F. | \$ 1,242 | \$ 6,085,800 |
| Greenway (Type B) ¹ | 2,300 | L.F. | \$ 1,521 | \$ 3,498,300 |
| Lipoa Parkway Widening (Type A3) ¹ | 2,900 | L.F. | \$ 956 | \$ 2,772,400 |
| Roads - Embankment | 50,000 | C.Y. | \$ 5 | \$ 250,000 |
| Roads - Excavation | 30,000 | C.Y. | \$ 12 | \$ 360,000 |
| Subtotal - Roadway Improvements: | | | | \$ 21,215,300 |
| Drainage System | | | | |
| Trunk Drainline | 2,400 | L.F. | \$ 825 | \$ 1,980,000 |
| Drainline with Manholes and Catch Basins | 11,200 | L.F. | \$ 420 | \$ 4,704,000 |
| Drainage Detention Basin | 1 | EA. | \$ 370,000 | \$ 370,000 |
| Expansion of Existing Basin | 1 | EA. | \$ 100,000 | \$ 100,000 |
| Subtotal - Drainage System: | | | | \$ 7,154,000 |
| Building Site Mass Earthwork | | | | |
| Lots - Embankment | 200,000 | C.Y. | \$ 5 | \$ 1,000,000 |
| Lots - Excavation | 180,000 | C.Y. | \$ 12 | \$ 2,160,000 |
| Subtotal - Building Site Mass Earthwork: | | | | \$ 3,160,000 |

| Description | Approx. Quan. | Unit | Unit Price | Total |
|---|------------------|------|---------------|----------------------|
| INCREMENT 1 | | | | |
| <u>Offsite Improvements</u> | | | | |
| Potable Water System | | | | |
| Potable Well | | L.S. | | \$ 3,650,000 |
| Water Treatment Plant | | L.S. | | \$ 3,080,000 |
| 1.0 MG Water Tank | | L.S. | | \$ 2,100,000 |
| Transmission Lines, Control Tank and Access Roads | | L.S. | | \$ 3,660,000 |
| Subtotal - Potable Water System: | | | | \$ 12,490,000 |
| Non-Potable Water System | | | | |
| 0.4 MG Water Tank | | L.S. | | \$ 1,640,000 |
| Booster Pump Station | | L.S. | | \$ 640,000 |
| 14" Transmission Line | | L.S. | | \$ 600,000 |
| Subtotal - Non-Potable Water System: | | | | \$ 2,880,000 |
| Roadway Improvements | | | | |
| Lipoa Pkwy / Piilani Hwy Intersection ² | | L.S. | | \$ 1,387,000 |
| Ho'okena St./ Piilani Highway Intersection ² | | L.S. | | \$ 1,658,000 |
| Subtotal - Roadway Improvements: | | | | \$ 3,045,000 |
| TOTAL - INCREMENT 1: | | | | \$ 77,509,300 |

² See Schedule C for Detailed Breakdown

| Description | Approx. Quan. | Unit | Unit Price | Total |
|--|------------------|------|---------------|---------------|
| INCREMENT 2 | | | | |
| <u>Petition Area</u> | | | | |
| Sewer System | | | | |
| 8" Gravity Sewerline with Manholes | 25,300 | L.F. | \$ 150 | \$ 3,795,000 |
| Subtotal - Sewer System: | | | | \$ 3,795,000 |
| Potable Water System | | | | |
| 8" Waterline & Fittings | 12,500 | L.F. | \$ 90 | \$ 1,125,000 |
| 12" Waterline & Fittings | 4,400 | L.F. | \$ 130 | \$ 572,000 |
| 16" Waterline & Fittings | 1,700 | L.F. | \$ 160 | \$ 272,000 |
| Residential (SF) Service Lateral | 300 | | \$ 4,000 | \$ 1,200,000 |
| Residential (MF) Service Lateral | 25 | | \$ 8,500 | \$ 212,500 |
| Commercial Service Lateral | 100 | | \$ 8,500 | \$ 850,000 |
| Fire Hydrant | 105 | | \$ 2,700 | \$ 283,500 |
| Subtotal - Potable Water System: | | | | \$ 4,515,000 |
| Non-Potable Water System | | | | |
| 6" Irrigation Waterline & Fittings | 16,900 | L.F. | \$ 65 | \$ 1,098,500 |
| 8" Irrigation Waterline & Fittings | 2,100 | L.F. | \$ 90 | \$ 189,000 |
| 12" Irrigation Waterline & Fittings | 1,800 | L.F. | \$ 160 | \$ 288,000 |
| Subtotal - Non-Potable Water System: | | | | \$ 1,575,500 |
| Roadway Improvements | | | | |
| Roundabout | 2 | | \$ 600,000 | \$ 1,200,000 |
| Local Street (Type E) ¹ | 14,900 | L.F. | \$ 890 | \$ 13,261,000 |
| Split Connector (Type D) ¹ | 2,400 | L.F. | \$ 712 | \$ 1,708,800 |
| Connector Street (Type C) ¹ | 9,500 | L.F. | \$ 1,245 | \$ 11,827,500 |
| Greenway (Type B) ¹ | 700 | L.F. | \$ 1,521 | \$ 1,064,700 |
| Ninau Street Extension (Type C) ¹ | 800 | L.F. | \$ 1,242 | \$ 993,600 |
| Roads - Embankment | 105,000 | C.Y. | \$ 5 | \$ 525,000 |
| Roads - Excavation | 145,000 | C.Y. | \$ 12 | \$ 1,740,000 |
| Subtotal - Roadway Improvements: | | | | \$ 32,320,600 |

| Description | Approx. Quan. | Unit | Unit Price | Total |
|--|---------------|------|------------|---------------|
| INCREMENT 2 | | | | |
| <u>Petition Area</u> | | | | |
| Drainage System | | | | |
| Trunk Drainline | 3,600 | L.F. | \$ 825 | \$ 2,970,000 |
| Drainline with Manholes and Catch Basins | 26,700 | L.F. | \$ 420 | \$ 11,214,000 |
| Roadway Culvert | 4 | EA. | \$ 453,000 | \$ 1,812,000 |
| Drainage Detention Basin | 6 | EA. | \$ 200,000 | \$ 1,200,000 |
| Channel Confinement | 3,600 | L.F. | \$ 1,000 | \$ 3,600,000 |
| Subtotal - Drainage System: | | | | \$ 20,796,000 |
| Building Site Mass Earthwork | | | | |
| Lots - Embankment | 550,000 | C.Y. | \$ 5 | \$ 2,750,000 |
| Lots - Excavation | 635,000 | C.Y. | \$ 12 | \$ 7,620,000 |
| Subtotal - Building Site Mass Earthwork: | | | | \$ 10,370,000 |
| <u>Non-Petition Area</u> | | | | |
| Sewer System | | | | |
| 8" Gravity Sewerline with Manholes | 1,100 | L.F. | \$ 150 | \$ 165,000 |
| Subtotal - Sewer System: | | | | \$ 165,000 |
| Potable Water System | | | | |
| 12" Waterline & Fittings | 1,100 | L.F. | \$ 130 | \$ 143,000 |
| 16" Waterline & Fittings | 1,200 | L.F. | \$ 160 | \$ 192,000 |
| Commercial Service Lateral | 60 | | \$ 8,500 | \$ 510,000 |
| Fire Hydrant | 5 | | \$ 2,700 | \$ 13,500 |
| Subtotal - Potable Water System: | | | | \$ 858,500 |
| Non-Potable Water System | | | | |
| 6" Irrigation Waterline & Fittings | 1,100 | L.F. | \$ 65 | \$ 71,500 |
| Subtotal - Non-Potable Water System: | | | | \$ 71,500 |

| Description | Approx. Quan. | Unit | Unit Price | Total |
|--|------------------|------|---------------|----------------------|
| INCREMENT 2 | | | | |
| <u>Non-Petition Area</u> | | | | |
| Roadway Improvements | | | | |
| Connector Street (Type C) | 600 | L.F. | \$ 1,242 | \$ 745,200 |
| Greenway (Type B) | 500 | L.F. | \$ 1,521 | \$ 760,500 |
| Roads - Embankment | 10,000 | C.Y. | \$ 5 | \$ 50,000 |
| Roads - Excavation | 5,000 | C.Y. | \$ 12 | \$ 60,000 |
| Subtotal - Roadway Improvements: | | | | \$ 1,615,700 |
| Drainage System | | | | |
| Drainline with Manholes and Catch Basins | 1,100 | L.F. | \$ 420 | \$ 462,000 |
| Roadway Culvert | 1 | EA. | \$ 425,000 | \$ 425,000 |
| Drainage Detention Basin | 1 | EA. | \$ 100,000 | \$ 100,000 |
| Channel Confinement | 400 | L.F. | \$ 1,000 | \$ 400,000 |
| Bridge | 1 | EA. | \$ 500,000 | \$ 500,000 |
| Subtotal - Drainage System: | | | | \$ 1,887,000 |
| Building Site Mass Earthwork | | | | |
| Lots - Embankment | 165,000 | C.Y. | \$ 5 | \$ 825,000 |
| Lots - Excavation | 30,000 | C.Y. | \$ 12 | \$ 360,000 |
| Subtotal - Building Site Mass Earthwork: | | | | \$ 1,185,000 |
| <u>Offsite Improvements</u> | | | | |
| Potable Water System | | | | |
| Well 4 and 5 | | L.S. | | \$ 3,230,000 |
| Water Treatment Plant Extention | | L.S. | | \$ 1,205,000 |
| 0.5 MG Water Tank | | L.S. | | \$ 1,735,000 |
| Subtotal - Potable Water System: | | | | \$ 6,170,000 |
| TOTAL - INCREMENT 2: | | | | \$ 85,324,800 |

SCHEDULE B

**MAUI RESEARCH & TECHNOLOGY PARK
Roadway Unit Cost Breakdown**

November 21, 2012

| Description | Unit | Unit Price |
|--|------|---------------|
| Lipoa Parkway Widening (Type A3) | | |
| Pavement, 16' wide (DPW Class A) | L.F. | \$ 400 |
| Concrete Curbing, 2x | L.F. | \$ 100 |
| Sidewalk, 6'-0" Wide | L.F. | \$ 36 |
| Striping and Signage | L.F. | \$ 20 |
| Street Lighting and Underground Electrical Utilities | L.F. | \$ 200 |
| Street Landscaping and Irrigation | L.F. | \$ 200 |
| Cost Per Lineal Foot: | | \$ 956 |
| Greenway (Type B) | | |
| Pavement, 38' wide (DPW Class B) | L.F. | \$ 500 |
| Concrete Curbing, 4x | L.F. | \$ 200 |
| Sidewalks, 2 x 8'-0" Wide | L.F. | \$ 96 |
| Striping and Signage | L.F. | \$ 25 |
| Street Lighting and Underground Electrical Utilities | L.F. | \$ 400 |
| Street Landscaping and Irrigation | L.F. | \$ 300 |
| Cost Per Lineal Foot: | | \$ 1,521 |
| Connector Street (Type C) | | |
| Pavement, 38' wide (DPW Class B) | L.F. | \$ 500 |
| Concrete Curbing, 2x | L.F. | \$ 100 |
| Sidewalks, 2 x 6'-0" Wide | L.F. | \$ 72 |
| Striping and Signage | L.F. | \$ 20 |
| Street Lighting and Underground Electrical Utilities | L.F. | \$ 350 |
| Street Landscaping and Irrigation | L.F. | \$ 200 |
| Cost Per Lineal Foot: | | \$ 1,242 |

| Description | Unit | Unit Price |
|--|------|------------|
| Split Connector (Type D) | | |
| Pavement, 19' wide (DPW Class B) | L.F. | \$ 250 |
| Concrete Curbing, 2x | L.F. | \$ 100 |
| Sidewalk, 6'-0" Wide | L.F. | \$ 72 |
| Striping and Signage | L.F. | \$ 15 |
| Street Lighting and Underground Electrical Utilities | L.F. | \$ 175 |
| Street Landscaping and Irrigation | L.F. | \$ 100 |
| Cost Per Lineal Foot: | | \$ 712 |

| | | |
|--|------|--------|
| Local Street (Type E) | | |
| Pavement, 30' wide (DPW Class C) | L.F. | \$ 215 |
| Concrete Curbing, 2x | L.F. | \$ 100 |
| Sidewalk, 2 x 5'-0" Wide | L.F. | \$ 60 |
| Striping and Signage | L.F. | \$ 15 |
| Street Lighting and Underground Electrical Utilities | L.F. | \$ 300 |
| Street Landscaping and Irrigation | L.F. | \$ 200 |
| Cost Per Lineal Foot: | | \$ 890 |

SCHEDULE C
MAUI RESEARCH & TECHNOLOGY PARK
Piilani Highway Intersection Improvements - Cost Breakdown

November 21, 2012

| Description | Approx. Quan. | Unit | Unit Price | Total |
|--|------------------|------|---------------|--------------|
| Lipoa Parkway / Piilani Highway Intersection Improvements | | | | |
| Pavement, State Highway | 22,500 | S.F. | \$ 20 | \$ 450,000 |
| Concrete Drainage Swale | 1,700 | L.F. | \$ 60 | \$ 102,000 |
| Excavation | 10,000 | C.Y. | \$ 30 | \$ 300,000 |
| Embankment | 1,000 | C.Y. | \$ 15 | \$ 15,000 |
| Striping and Signage | | L.S. | | \$ 70,000 |
| Traffic Signal Equipment Relocation / Upgrade | | L.S. | | \$ 400,000 |
| Street Lighting Relocation / Upgrade | | L.S. | | \$ 50,000 |
| | | | Subtotal: | \$ 1,387,000 |
| Ho'okena Street / Piilani Highway Intersection Improvements | | | | |
| Pavement, DPW Class B | 15,000 | S.F. | \$ 13 | \$ 195,000 |
| Pavement, State Highway | 30,000 | S.F. | \$ 20 | \$ 600,000 |
| Concrete Drainage Swale | 1,300 | L.F. | \$ 60 | \$ 78,000 |
| Excavation | 4,000 | C.Y. | \$ 20 | \$ 80,000 |
| Embankment | 15,000 | C.Y. | \$ 7 | \$ 105,000 |
| Striping & Signage | | L.S. | | \$ 50,000 |
| Golf Cart Underpass | | L.S. | | \$ 400,000 |
| Street Lighting | | L.S. | | \$ 150,000 |
| | | | Subtotal: | \$ 1,658,000 |

| Table 1 | | |
|--|--|---|
| Permit / Approval Required | Responsible Authority | Projected Submittal Date |
| HRS Chapter 343 Compliance | State Land Use Commission | June 1, 2012 |
| State Land Use District Boundary Amendment (DBA) | State Land Use Commission | June 2010, updated Dec. 2012 |
| Community Plan Amendment (CPA) | Maui County Council | December/January 2012 |
| Change in Zoning (CIZ) | Maui County Council | December/January 2012 |
| Final Environmental Impact Statement (EIS) | State Land Use Commission | December/January 2012 |
| Driveway Permit | Maui County, Public Works, Development Services Division | 2013. These permits will be applied for in conjunction with construction of the next commercial building in the MRTP project area. |
| Building Permit | Maui County, Public Works, Development Services Division | |
| Wastewater Discharge (Hookup) Permit | Maui County, Department of Environmental Mangement, Wastewater Division | |
| Well Construction and Pump Installation Permit | State of Hawaii, DLNR-CWRM | 2014. These permits will be applied for in conjunction with development of the project well water source. |
| Grading and Grubbing Permit | Maui County, Public Works, Development Services Division | 2015. These permits will be applied for in conjunction with construction of the water treatment plant, storage tank and transmission line components of the Increment 1 potable water system. |
| NPDES Permit | State of Hawaii, DOH | |
| Air Pollution Control Permit | State of Hawaii, DOH | |
| Community Noise Permit | State of Hawaii, DOH | |
| Section 404 Clean Water Act Approval | Department of the Army | 2015. These permits will be applied for in conjunction with the construction of the Makai Residential Area drainage basin's discharge outlet into Waipuilani Gulch. |
| Section 401 Clean Water Act | State of Hawaii, DOH | |
| Stream Channel Alternation Permit | State of Hawaii, DLNR-CWRM | |
| Preliminary Subdivision Approval | Maui County, Public Works, Development Services Division | 2015. These approvals will be sought in conjunction with the first commercial or residential subdivision application filed to facilitate development under the new MRTP Master Plan |
| Easements for Utilities and Roadways | Various | |
| Drainage Approval | Maui Department of Public Works, Engineering Division | |
| Final Subdivision Approval | Maui County, Public Works, Development Services Division | |
| Permit to Perform Work Within the State ROW | State of Hawaii, DOT | 2016. This permit will be applied for in conjunction with construction of the Piilani Highway / Lipoa Parkway intersection improvements |

NEIL ABERCROMBIE
GOVERNOR

MAJOR GENERAL DARRYLL D. M. WONG
DIRECTOR OF CIVIL DEFENSE

DOUG MAYNE
VICE DIRECTOR OF CIVIL DEFENSE



PHONE (808) 733-4300
FAX (808) 733-4287

STATE OF HAWAII
DEPARTMENT OF DEFENSE
OFFICE OF THE DIRECTOR OF CIVIL DEFENSE
3949 DIAMOND HEAD ROAD
HONOLULU, HAWAII 96816-4495

August 7, 2012

RECEIVED

AUG 10 2012

PACIFIC RIM LAND, INC.
MAUI - MAUI

Mr. Steve Perkins
Maui R & T Partners, LLC
1300 North Holopono, Suite 201
Kihei, Hawaii 96753

Dear Mr. Perkins:

Draft Environmental Impact Statement (DEIS)
Maui Research and Technology Park Master Plan Update
Island of Maui, Makawao District

Thank you for the opportunity to comment on this proposed development.

The proposed mixed-use development will increase the residential population in an area with limited safe room options. As a result, we strongly recommend incorporation of hardening measures for safe rooms within planned residential facilities, and the hardening of proposed community facilities so as to withstand high-wind and seismic events.

Additionally, although the bulk of the proposed development has siren coverage from the new Kihei Community Center siren, we ask that one omni 121 db(c) directional siren be installed on the northeast section of the property.

We defer to the appropriate state and federal agencies as to the protection of coastal and marine environment as well as the cultural, historical, and archeological elements of the property.

If you have any questions please call Havinne Okamura, Hazard Mitigation Planner, at (808)733-4300, extension 556.

Sincerely,

 EXECUTIVE
OFFICER

For DOUG MAYNE
Vice Director of Civil Defense



Landscape Architecture
City & Regional Planning

December 19, 2012

Mr. Doug Mayne, Vice Director
State of Hawaii, Dept. of Defense
Office of the Director of Civil Defense
3949 Diamond Head Road
Honolulu, HI 96816-4495

Dear Mr. Mayne,

RE: Comments on the Draft Environmental Impact Statement for the Proposed Maui Research and Technology Park Master Plan update, located in Kihei, Maui, Hawaii at TMK's: (2) 2-2-024:1-9,14-18,31,32, 34, 36-46 and (2) 2-2-002:054 (por.)

Thank you for your letter of August 7, 2012 providing comments on the above referenced project. The Applicant will take into consideration your recommendation to incorporate hardening measures for safe rooms within planned residential facilities and community facilities so as to withstand high-wind and seismic events. Additionally, as requested in your letter, the Applicant will install one (1) omni 121 db (c) directional siren on the northeast section of the Maui Research and Technology Park.

Thank you again for providing us with your comments. Please feel free to call myself or Mr. Brett Davis of our office at (808) 242-1955 should you have any questions.

Sincerely yours,

Jordan E. Hart
President

CC. Mr. Steve Perkins, Pacific Rim Land, Inc.
Project File 08-132 ✓



STATE OF HAWAII
DEPARTMENT OF EDUCATION
P.O. BOX 2360
HONOLULU, HAWAII 96804

RECEIVED

AUG - 2 2012

CHRIS HART & PARTNERS, INC.
Landscape Architecture and Planning
CC: Brett 08/13/12

OFFICE OF SCHOOL FACILITIES AND SUPPORT SERVICES

July 31, 2012

Mr. Steve Perkins, Project Manager
Maui R&T Partners, LLC
1300 North Holopono, Suite 201
Kihei, Hawaii 96753

Dear Mr. Perkins:

Subject: Draft Environmental Impact Statement and Maui County Change in Zoning and Community Plan Amendment for the Maui Research and Technology Park Master Plan Update, TMKs (2) 2-2-24:01-07, (2) 2-2-24:08, (2) 2-2-24:09, (2) 2-2-24:14-18, (2) 2-2-24:31, (2) 2-2-24:32, (2) 2-2-024:34, (2) 2-2-24:36-46, and (2) 2-2-002:054 (por.), Makawao, Maui, Hawaii

The Department of Education (DOE) has reviewed the Draft Environmental Impact Statement (EIS) and Maui County Change in Zoning and Community Plan Amendment for the Maui Research and Technology Park Master Plan Update.

The DOE has the following comments:

- Impact District and School Impact Fees. As stated in the Draft EIS, the proposed project is within the Makawao Cost District of the Central Maui Impact District. Residential units in the project are subject to school impact fees, and the developer should enter into an impact fee agreement with the DOE.
- Updated Enrollment and Projected Enrollment Figures. The enrollment statistics in the Draft EIS were for the 2010-11 school year. Updated enrollment figures for the 2011-12 school year and enrollment projections for the 2016-17 school year is below.

| School Name | 2011-12 Enrollment | 2016-17 Projected Enrollment |
|-------------------------|--------------------|------------------------------|
| Kahului Elementary | 986 | 1031 |
| Kihei Elementary | 920 | 966 |
| Lihikai Elementary | 971 | 996 |
| Kamalii Elementary | 638 | 666 |
| Pomaikai Elementary | 655 | 717 |
| Lokelani Intermediate | 597 | 635 |
| Maui Waena Intermediate | 1084 | 1197 |
| Maui High | 1826 | 1855 |

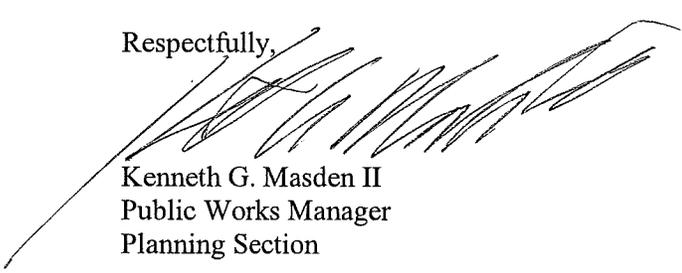
Mr. Steve Perkins
Page 2
July 31, 2012

Kihei Charter School's 2011-12 enrollment was 509.

- Proposed School Site. The DOE would like more detail on the proposed school site within the project. Please note that providing a campus to a private school or a charter school campus would not automatically meet the land requirements of the DOE's Central Maui Impact District.
- Connector Road to High School. The DOE would like more information on the road connecting the proposed Kihei High School to the project.

Thank you for the opportunity to provide comments. If you have any questions, please call Jeremy Kwock of the Facilities Development Branch at (808) 377-8301.

Respectfully,



Kenneth G. Masden II
Public Works Manager
Planning Section

KGM:jmb

c: Bruce Anderson, CAS, Baldwin/Kekaulike/Maui Complex Areas
✓Brett Davis, Chris Hart & Partners, Inc.
OEQC



**CHRIS
HART**
& PARTNERS, INC.

Landscape Architecture
City & Regional Planning

September 24, 2012

Mr. Kenneth G. Masden II, Public Works Manager
Planning Section
State of Hawaii, Department of Education
P.O. Box 2360
Honolulu, HI 96804

Dear Mr. Masden,

RE: Comments on the Draft Environmental Impact Statement for the Proposed Maui Research and Technology Park Master Plan update, located in Kihei, Maui, Hawaii at TMK's: (2) 2-2-024:1-9,14-18,31,32, 34, 36-46 and (2) 2-2-002:054 (por.)

Thank you for your letter of July 31, 2012 indicating that the MRTP is located within the Makawao Cost District of the Central Maui Impact District. We understand that the residential units in the project are subject to school impact fees and, Applicant will work with Kihei Charter School, and the DOE to reach agreement on the best use of project sited land or impact fees for education in South Maui .

Thank you for the updated enrollment and projected enrollment figures, the Applicant's consultant will incorporate the information into the Final EIS.

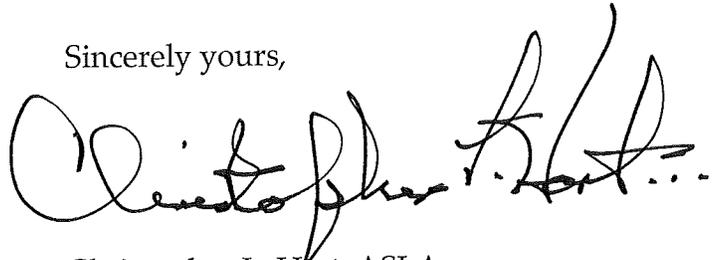
The civic site, which would also conceptually include charter or private schools, was included in the project by the project master planner, Calthorpe Associates. The civic use site on the illustrative plan is 10.1 Acres in size, and located in the heart of the mixed use center. Civic activities such as schools or other civic uses are an important component of our master plan for a community of innovation.

The Applicant is aware that providing a school campus would not automatically meet the land requirements of the DOE's Central Maui Impact District..

While both the applicant and the Department of Education acknowledge the wish for direct pedestrian and bicycle access between the Project and the future Kihei High School, The type and timing of connection is uncertain at this time. A direct route of access for bicycles and pedestrians is being considered in the Waipuilani gulch area near Piilani highway. The applicant has discussed pedestrian and bicycle connectivity options with the Department of Education team assigned to the future Kihei High School and we have agreed to keep in close contact as plans for the High School are made. The applicant will work with the Department of Education, the owner of Waipuilani Gulch, and other government and community stakeholders towards resolving the issue of pedestrian connectivity.

Thank you again for providing us with your comments. Please feel free to call me or Mr. Brett Davis at (808) 242-1955 should you have any questions.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Christopher L. Hart". The signature is fluid and cursive, with a large initial "C" and "H".

Christopher L. Hart, ASLA
President
Landscape Architect • Planner

CC. Mr. Steve Perkins, Pacific Rim Land, Inc.
Project File 08-132



CHRIS
HART
& PARTNERS, INC.

Landscape Architecture
City & Regional Planning

March 1, 2013

Mr. Kenneth G. Masden II, Public Works Manager
Planning Section
State of Hawaii, Department of Education
P.O. Box 2360
Honolulu, HI 96804

Dear Mr. Masden,

RE: Comments on the Draft Environmental Impact Statement for the Proposed Maui Research and Technology Park Master Plan update, located in Kihei, Maui, Hawaii at TMK's: (2) 2-2-024:1-9,14-18,31,32, 34, 36-46 and (2) 2-2-002:054 (por.)

Thank you for your letter of July 31, 2012; this letter supersedes the response letter dated September 24, 2012 to conform to HAR §11-200-22(c)(2) Review of Environmental Impact Statements, *"Response letters reproduced in the text of the final EIS shall indicate verbatim changes that have been made to the text of the draft EIS."* The following language is in the final EIS and can be found in Section III C. 4.

In response to comments from the DOE; in 2007, the Hawaii Legislature enacted Act 245 as Section 302A, HRS, "School Impact Fees". Based upon this legislation, the Department of Education has enacted impact fees for residential developments that occur within identified school impact districts. The Project is within the boundaries of the Central Maui Impact District and is within the Makawao Cost Area of that district. Projects within the district and cost area pay a construction fee and either a fee-in-lieu of land or a land donation, at the DOE's discretion. At the appropriate time, the applicant will contact the DOE to enter into an impact fee agreement.

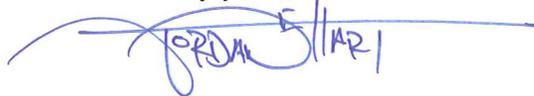
Mr. Kenneth G. Masden II
DOE Response Letter
MRTP DEIS
March 1, 2013
Page 2 of 2

The civic site, which would also conceptually include charter or private schools, was included in the project by the project master planner, Calthorpe Associates. The civic use site on the illustrative plan is 10.1 Acres in size, and located in the heart of the mixed use center. Civic activities such as schools or other civic uses are an important component of our master plan for a community of innovation. The Applicant is aware that providing a school campus would not automatically meet the land requirements of the DOE's Central Maui Impact District.

While both the applicant and the Department of Education acknowledge the wish for direct pedestrian and bicycle access between the Project and the future Kihei High School, The type and timing of connection is uncertain at this time. A direct route of access for bicycles and pedestrians is being considered in the Waipuilani gulch area near Piilani highway. The applicant has discussed pedestrian and bicycle connectivity options with the Department of Education team assigned to the future Kihei High School and we have agreed to keep in close contact as plans for the High School are made. The applicant will work with the Department of Education, the owner of Waipuilani Gulch, and other government and community stakeholders towards resolving the issue of pedestrian connectivity.

Thank you again for providing us with your comments. Please feel free to call Mr. Brett Davis at (808) 242-1955 should you have any questions.

Sincerely yours,



Jordan E. Hart
President

CC. Mr. Steve Perkins, Pacific Rim Land, Inc.
Project File 08-132



United States Department of the Interior



FISH AND WILDLIFE SERVICE
Pacific Islands Fish and Wildlife Office
300 Ala Moana Boulevard, Room 3-122, Box 50088
Honolulu, Hawaii 96850

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CHRIS HART & PARTNERS, INC.
Landscape Architecture and Planning

CC: Bvlt 08/13/12

In Reply Refer To:
2012-TA-0359
2011-TA-0325
2010-TA-0527

Mr. Christopher L. Hart
President
Chris Hart & Partners, Inc.
115 North Market Street
Wailuku, Hawaii 96793

Subject: Technical Assistance for the Proposed Maui Research and Technology Park
Project, Maui

Dear Mr. Hart:

The U.S. Fish and Wildlife Service (Service) received your letter on July 2, 2012, with an enclosure of the Draft Environmental Impact Statement (DEIS) for the Maui Research and Technology Park Project in Kihei, Maui. The Service previously provided comments on the DEIS preparation notice in a letter dated October 28, 2010, (Service File 2010-TA-0527) and in another dated June 7, 2011 (Service File 2011-TA-0325). The proposed action entails the construction of office, civic, live-work, park, and retail facilities on 58 acres, flanked by 100 acres of residential development.

The proposed project area is located immediately downslope from a large tract of intact native dryland forest. Based on information and comments provided by the Service, you conducted additional surveys to determine whether any federally listed species occur at the project site. Nine additional plant species, none of which are native to Hawaii, were detected. While one species, *Ipomoes obscura*, may be a host to adult, endangered Blackburn's sphinx moth (*Manduca blackburni*), no other larval or adult host plants were identified. The Service understands the effort of conducting additional surveys and appreciates your response to our previous comments. The Service also acknowledges the numerous conservation and avoidance measures that you have incorporated into the project description regarding impacts to seabirds, Blackburn's sphinx moth, and the spread of invasive species. The following guidance should assist you in refining your assessment of project impacts to federally listed species and native habitats.

Hawaiian hoary bat

Previous comments provided by the Service advised you to avoid cutting vegetation greater than



15 feet tall during the Hawaiian hoary bat (*Lasiurus cinereus semotus*) breeding season (June 1 through September 15) to avoid impacts to dependent, non-volant, juvenile bats. The Service acknowledges that the DEIS includes language proscribing the felling or trimming of trees during those dates as part of its minimization and avoidance measures for the species during the construction phase. The Service recommends that the same measures be incorporated into the proposed Master Plan to cover future landscaping and maintenance activities once construction activities have been completed.

Minimize Wildfire Impacts

Previous letters provided by the Service encouraged you to develop methods to avoid and minimize the impacts of wildfire on sensitive habitats and ecosystems upslope of the project area. The native forest and other nearby natural resources on the leeward slopes of Haleakala could be severely impacted by a wildfire. The DEIS states that non-native vegetation on the project site will be cleared to reduce the risk of fire, measures will be taken during the project construction phase to maintain a sufficient fire break along the boundaries of the proposed expansion, and that grazed ranches adjoining the property will act as de-facto fire breaks in the long-term. However, measures for minimizing wildfire impacts included in the draft EIS are predicated on private landowner cooperation in regards to grazing activity on their property adjacent to the proposed expansion. To ensure that fire minimization measures remain adequate for the life of the project, the Service recommends that you develop contractual agreements with these landowners so that grass fuel loading does not exceed one ton per acre within a 150-foot buffer from the upper edge of the proposed expansion site. The Service also recommends that a drivable firebreak be maintained along the upslope edge of the project area as part of the proposed project description.

Minimize Attraction and Impacts to Listed Waterbirds

The endangered Hawaiian goose (*Branta sandvicensis*), Hawaiian coot (*Fulica alai*), Hawaiian duck (*Anas wyvilliana*), and Hawaiian stilt (*Himantopus mexicanus knudseni*), collectively known as waterbirds, may be attracted to drainage features and mowed grass areas on the project site. This attraction may increase their vulnerability to collisions with vehicles and exposure to domesticated and feral animal predators. To address these issues, tenants will be expected to comply with Maui County leash laws. Moreover, Maui R & T Partners, LLC will institute a pest control program administered by groundskeepers aimed primarily at rodent and feral animal control. The Service acknowledges the conservation and avoidance measures that you have incorporated into the project description regarding impacts to listed waterbirds. Nonetheless, the Service recommends that a more comprehensive resource management plan be implemented to address and minimize the impacts to listed waterbirds due to the creation of a constructed wetland (via the incorporation of a stormwater retention basin) as described in the proposed Master Plan. Although the aforementioned retention basin will only be intermittently filled with water, it will remain an attractant to listed waterbirds well after the construction phase of the proposed project. Therefore, the Service offers the following suggestions to minimize impacts to listed waterbird species:

- Minimize the duration of water retention, after rain events, at the proposed on-site stormwater retention basin.
- Implement public education programs for tenants and residents that discourage the feeding of feral animals. In addition, to minimize the chance of collision with vehicles,

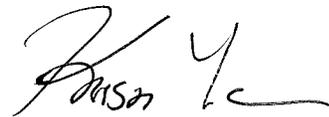
speed limits of 20 miles-per-hour or less should be posted in areas where listed waterbirds are observed.

- Sturdy, animal-proof garbage containers should be used to prevent increases in populations of rodents, mongoose, and feral cats.
- Implement a predator control program that incorporates adequate control station densities around areas that may experience increased waterbird visitation due to the direct and indirect effects of the proposed project. In this regard, the Service can provide additional guidance upon request.
- The Service also recommends that the applicant construct a fence to exclude domesticated animals that may kill or injure listed waterbirds in areas that may experience increased waterbird visitation.

In the course of your National Environmental Policy Act (NEPA) analysis, if you find that the proposed project may directly or indirectly impact federally listed species, then Maui Research Partners, LLC., should apply for an incidental take permit under section 10(a)(1)(A) of the Endangered Species Act of 1973 (ESA), as amended (16 U.S.C. 1531 *et seq.*). A section 10 permit application must include a habitat conservation plan that identifies the effects of the action on listed species and their habitats and defines measures to minimize and mitigate adverse effects.

The Service appreciates your efforts to conserve endangered species and native ecosystems. If you have questions regarding these comments, please contact Ian Bordenave, Consultation and Habitat Conservation Planning Program Biologist (phone: 808-792-9400; fax: 808-792-9581).

Sincerely,



for Loyal Mehrhoff
Field Supervisor

cc: Scott Fretz, Hawaii Department of Land and Natural Resources, Division of Forestry and Wildlife, Honolulu



**CHRIS
HART**
& PARTNERS, INC.

Landscape Architecture
City & Regional Planning

October 12, 2012

Loyal Mehrhoff, Field Supervisor
Pacific Islands Fish and Wildlife Office
Fish and Wildlife Service
US Department of the Interior
300 Ala Moana Boulevard, Room 3-122, Box 50088
Honolulu, Hawaii 96850

Subject: Technical Assistance for the Proposed Maui Research and Technology Park Project,
Maui

Dear Dr. Mehrhoff,

Thank you for your most recent letter dated August 1, 2012. The following responses to your comments are provided:

Hawaiian Hoary Bats

To minimize the potential impacts to the Hawaiian hoary bat, woody plants greater than 15 feet tall will not be removed or trimmed during the breeding season between June 1 and September 15 throughout the construction phase and for future landscape planting and maintenance activities once construction is complete.

Minimize Wildlife Impacts

During project construction, measures will be taken to maintain a sufficient fire break along the boundaries of the proposed MRTTP expansion area. When completed, the MRTTP will completely remove all non-native grass, weed, and scrub fuels from an area of approximately 414 acres. Undeveloped lands immediately adjacent to the northern, and eastern and southern boundaries of the MRTTP are owned by Kaonoulu Ranch and Haleakala Ranch, respectively. These lands serve as a defacto fire break for MRTTP because they are currently zoned (Ag) Agriculture and are actively grazed by cattle. Grazing plays a key role in minimizing fuel loads on privately

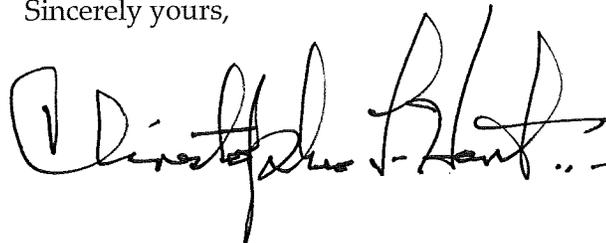
owned lands outside the project footprint and the MRTP will continue to coordinate closely with surrounding landowners to reduce the risk of wildfire to the area. The MRTP is currently serviced by the Kihei Fire Station which is located approximately 1.5 miles from the MRTP. The completed MRTP will have fire hydrants and water pressure as required by code to service the developed community.

Minimize Attraction and Impacts to Listed Waterbirds

Expansion of the MRTP will not involve the creation of golf course(s) nor open water features (wetlands, lakes or ponds) that may attract listed waterbirds. The drainage master plan includes open drainage retention basins; however the basins are expected to be dry a majority of the time because of the limited annual rainfall in the Kihei area and therefore standing water is not expected to occur. Also, Maui R&T Partners, LLC will institute a pest control program administered by groundskeepers aimed primarily at rodent and feral animal control. Tenants will be expected to comply with Maui County leash laws.

Thank you again, for providing us with your response. Please feel free to call myself or Mr. Brett Davis at (808) 242-1955 should you have any questions.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Christopher L. Hart". The signature is fluid and cursive, with a large initial "C" and "H".

Christopher L. Hart, ASLA

President

Landscape Architect • Planner

CC. Mr. Steve Perkins, Pacific Rim Land, Inc.
Project File 08-132

163 Kuli Pu'u Street
Kihei, HI 96753-7164
August 5, 2012

Mr. Daniel E. Orodenker
State of Hawai'i
State Land Use Commission
Department of Business Economic Development & Tourism
P.O. Box 2359
Honolulu, Hawaii 96804-2359

Subject: *Draft Environmental Impact Statement for the Proposed Maui Research & Technology Park Master Plan Update*

Dear Mr. Orodenker:

I appreciate the opportunity to review the Draft Environmental Impact Statement (DEIS) for the proposed *Maui Research & Technology Park (MRTP) Master Plan Update* (Project). I am a California Registered Traffic Engineer with extensive experience reviewing traffic studies and environmental documents for proposed development projects for a large municipality in southern California. As a soon-to-be-resident of Kihei, I have a keen interest in how the MRTP may affect traffic and circulation in South Maui. After reviewing the DEIS it is clear that the DEIS has not been prepared in accordance with Chapter 11-200, Hawaii Administrative Rules (HAR).

HAR §11-200 -12 states, "In determining whether an action may have a significant effect on the environment, the agency shall consider every phase of a proposed action, the expected consequences, both primary and secondary, and the cumulative as well as the short-term and long-term effects of the action."

The MRTP DEIS fails to disclose the Project's expected primary (i.e. direct), cumulative, short-term, and long term effects, and it fails to consider every phase of the Project due to deficiencies in the DEIS' Traffic Impact Analysis Report (TIAR).

Additionally, the DEIS claims the MRTP Master Plan to be a "Smart Growth" project, but the proposed Project does not, or may not, incorporate at least three of the ten key principles of Smart Growth of providing a mix of land uses, creating walkable neighborhoods, and providing a variety of transportation choices.

Impacts Not Fully Disclosed:

The TIAR lacks technical data, specifics, and supporting documentation to validate its analyses and conclusions. However, based on the limited information provided in the TIAR, it is clear that:

- The data in the TIAR indicates the Project would have significant impacts but these impacts are not acknowledged in the DEIS nor in its TIAR.
- The DEIS grossly underestimates the traffic the Project would generate and therefore would likely have additional impacts not disclosed in the DEIS.
- The DEIS assumes improvements in place that may not be constructed when they are assumed to be constructed, or perhaps may not be constructed at all due to uncertain funding. In the event these improvements are not constructed, the Project would have additional impacts not disclosed in the DEIS.
- The TIAR does not analyze a sufficiently large study area so the Project may have additional impacts not disclosed in the DEIS.

First, the analysis in the TIAR indicates the project would have significant impacts at two locations, but these impacts are not called out in the DEIS nor its TIAR. The Project has a significant impact at the intersection of East Welakahoa Road/Pi'ilani Highway in Phase 1 that is not acknowledged in the DEIS. The DEIS should acknowledge and mitigate this impact by installing a traffic signal at this location as well as installing traffic signal interconnect to the adjacent signalized intersections along Pi'ilani Highway so these traffic signals may be adequately coordinated.

The Project also has a significant impact at the roundabout of Liloa Drive/Pi'ikea Ave in Phase 1 that is not acknowledged in the DEIS. The Project causes the level of service (LOS) at this roundabout to drop from acceptable to unacceptable levels of service (LOS) as evidenced by the Synchro analysis sheets from the TIAR (Attachment A). Instead of acknowledging this is a Project impact, the DEIS indicates this roundabout would operate at near capacity and that capacity would need to be increased in Phase 1 in the without Project condition. The DEIS must acknowledge this impact and should identify feasible mitigation. MRTP should also pay its fair share for implementation of this mitigation. This fair share should be based on the amount of new traffic that would be added to this roundabout by MRTP compared to the total growth in traffic.

Second, the DEIS grossly underestimates the trip generation of the Project. For example, It assumes a 57-59% internal capture rate for each analysis scenario and claims this internal capture rate is based on Institute of Traffic Engineers (ITE) methodology. However, other recent mixed use development projects in the area which used the ITE methodology to determine their internal capture rates, Wai'lele and Honua'ula, arrived at a 10% and 15% internal capture rate respectively (Attachment B). To assume such a high internal capture rate, particularly in a project proposing so little retail for its residents and employees to utilize, is unrealistic and technically unjustified.

Additionally, a mode split of 10% (transit plus pedestrian plus bicycle) was assumed by the TIAR for all phases of the project, yet no technical data was provided supporting this

assumption. In fact, assuming a 5% mode mode split in Phase 1 would exceed the transit capacity.

Third, roadway improvements are assumed to be constructed in Phase 1 (Year 2024) and Phase 2 (Year 2034) which have no guaranteed funding. These improvements include the North-South Collector, the Upcountry Highway, and the Mauka Collector. Public improvements should only be assumed that are programmed, scheduled, and fully funded in either the current approved Maui County budget or the State Transportation Improvement Plan (STIP) and whose environmental documents have been finalized and approved by the accepting authority. For roadway improvements that are assumed which are requirements of other development projects, these improvements should not be assumed in the TIAR unless they are assured by permit and bond .

Without the construction of the improvements assumed in the DEIS, the Project would have significant traffic impacts to Pi'ilani Highway and potentially other roadway facilities that are not disclosed in the DEIS.

Therefore, the DEIS should be revised to either:

- A. Indicate the Project will construct these improvements or;
- B. Disclose the Project's impacts if these improvements are not constructed or;
- C. Indicate the Project will not move forward until these improvements are in place.

If Alternative C above is selected by the developer, then building permits should not be issued for Phase 1 until the improvements assumed in the Phase 1 analysis are constructed; similarly, building permits should not be issued for Phase 2 until the improvements assumed in Phase 2 are constructed.

The forthcoming discretionary permits must have a limitation on the Project's trip generation (average daily traffic (ADT), peak hour a.m. inbound, peak hour a.m. outbound, peak hour p.m. inbound, and p.m. peak hour outbound) for each phase, and Maui County would need to track this trip generation as the site develops.

Fourth, the TIAR does not analyze a sufficiently large study area. According to *Transportation Impact Analysis for Site Development* published by the most widely recognized and respected traffic engineering organization, the Institute of Transportation Engineers (ITE), an additional 100 vehicles per hour can change the level of service or appreciably increase the volume-to-capacity ratio of an intersection approach. (See Page 2 of Attachment C.) Even with the dramatically underestimated trip generation assumed in the TIAR, Figure 6 of the TIAR shows MRTP would generate more than 415 vehicle trips per hour in the southbound direction on Pi'ilani Highway at the intersection of East Waipuilani Road/Ho'okena Street/Pi'ilani Highway (Attachment D), and more than 157 vehicle trips per hour in the southbound direction at East Welakahao Street/Pi'ilani Highway. These traffic volumes indicate the study area should be expanded north and south to other intersections along Pi'ilani Highway. In particular, the intersection of Ka'ono'ulu Street/Pi'ilani Highway, which will serve as the primary access point of the proposed Pi'ilani Promenade shopping center, should be studied in the TIAR. The May 7,

2012 draft traffic study by Phillip Rowell and Associates for *Pi'ilani Promenade* indicated this intersection would fail unless mitigations are implemented in Year 2015 with the *Pi'ilani Promenade* fully occupied. Even with the improvements proposed by the Pi'ilani Promenade project, any delay added to this intersection would cause it to operate at an unacceptable LOS.

Because the TIAR's study area was insufficient, MRTP may have significant traffic impacts to other intersections that are not disclosed in the DEIS.

Fails to Consider Every Phase of the Project

As indicated in the DEIS, it is anticipated that MRTP would receive all its entitlements by Year 2014. It is likely that a significant portion of Phase 1 of the Project could be constructed well in advance of Year 2024. Opening Day scenario(s) sooner than Year 2024 should be provided in order to assess the project's direct traffic impacts particularly to Pi'ilani Highway prior to the construction of the North/South Collector street. Additionally, the TIAR provides only two analysis scenarios, a Phase 1 (Year 2024) and a Phase 2 (Year 2034). Providing only two analysis scenarios for a project of this size and duration is insufficient; typically a TIAR for a Project of this size trip generation and duration of construction would provide several analysis scenarios.

Smart Growth:

As cited in the *County of Maui 2030 General Plan Countywide Policy Plan* (Page 3 of Attachment E), one of the ten key principles of Smart Growth is a development that provides a mix of land uses. The Project should not develop as market conditions warrant, as indicated it would in the DEIS, because it may not provide the mix of land uses characteristic of Smart Growth. Instead, the Project should develop with a mix of land different land uses in each phase (housing, employment, and commercial retail), otherwise, the Project would not be a Smart Growth project as it develops. For example, if there is a market demand for housing and the Project constructs all housing prior to constructing the employment center, then the Project at that time would not be Smart Growth. Furthermore, the Project at that point may result in more traffic on the surrounding roadway network as residents would not have employment and retail opportunities in the MRTP.

A Smart Growth development would be one where the housing, employment, and retail needs of the community are within the community. The proposed MRTP, however, provides an insufficient amount and type of retail to meet its resident's needs. This 100,000 sf of retail is "specialty retail" based on an e-mail received from project facilitator Steve Perkins (Attachment A). Specialty retail is defined as merchandise line of goods for a particular and usually selective clientele. Examples are stores selling video tapes, bagels, leather goods, and imported china. Specialty retailers have a narrow but deep selection in their specialty. This type of retail would not provide for the daily needs of the residents of MRTP. For example, a grocery store is not specialty retail, nor is a Costco or Target specialty retail. Nor are these type of stores "specialty retail" based on the definition of this land use provided by the Institute of Transportation Engineers to Land Use Code 814 (see Attachment F). Residents would need to drive their automobile and shop elsewhere to shop for their daily needs.

Also as cited in the *County of Maui 2030 General Plan Countywide Policy Plan* (Pages 2 - 3 of Attachment E), two other of key principles of Smart Growth are creating walkable neighborhoods and providing a variety of transportation choices. A key element of Smart Growth is the integration of design features that would encourage walking, bicycling, or transit use. However, the proposed Project, as presented in the DEIS, lacks features to allow one to conclude that MRTP would result in a multi-modal environment.

While the Project does incorporate many features that help improve walkability, it lacks many features that could be incorporated to further create a more pedestrian friendly environment. These features may include pedestrian scale lighting, decorative pavers, and raised crosswalks. Traffic calming measures other than just narrowing vehicular travel lanes should also be integrated in the design including, for example, pop-outs, traffic circles, and raised crosswalks. Finally, the site should also be designed to accommodate persons with disabilities by providing, for example, pedestrian curb ramps and pedestrian countdown timers and/or audible pedestrian heads at signalized intersections.

Pedestrian connectivity is an essential element of any Smart Growth project. The DEIS states, it will, "work with Kihei High School to provide bicycle and pedestrian connectivity between the school and MRTP." This lack of commitment on the part of the Project to provide a pedestrian connection to the planned Kihei High School is not acceptable for a project claiming to be Smart Growth. MRTP should entirely fund the design and construction of a facility that provides safe and efficient bicycle and pedestrian connectivity between the future school and the Project site, particularly because it would only be used by residents or employees of MRTP and not other members of the community.

Also, concerning providing connectivity for both pedestrians and bicyclists across Pi'ilani Highway, the DEIS states MRTP will, "work with HDOT to provide a suitable interface with Piilani Highway for pedestrian and bicycle facilities." The DEIS should describe what specifically would be required to create this interface, and the Project should make a firm commitment to fully fund whatever improvements need to be implemented to create this interface. The DEIS should also discuss how pedestrians and bicyclists using the proposed new pedestrian/bicycle path running mauka/makai that would connect up to the pedestrian/bicycle path on Liloa Drive would cross Pi'ilani Highway since, based on the figure showing this new path in the DEIS (Figure 39) this new path would not intersect Pi'ilani Highway at a signalized intersection.

The Project fails to provide necessary amenities to truly promote bicycling within the site. For example, with the exception of Lipoa Parkway, on-street bicycle lanes are not proposed. Such bike lanes are necessary to provide bicycle connectivity and more importantly, provide a safer option than requiring bicyclists to share narrow travel lanes with automobile, even if the automobiles would be travelling slower than on a typical local or collector street. To expect bicyclists to share the road with automobiles on lanes as narrow as 11 feet does not encourage bicycling nor does it promote safety. Further, the DEIS makes no mention nor does the Project make any commitment to incorporate bicycle amenities such as bicycle showers, lockers, and changing rooms for the employment centers. Other features to encourage bicycling that should

be considered include bicycle boulevards, cycle tracks, bicycle signal detection at traffic signals, and, secure bicycle parking at transit stops.

1/4 mile is the maximum distance pedestrians are typically willing to walk to a bus stop based data collected in national and international studies. The Transit Circulation Plan in the DEIS shows large areas of the project site, including the residential, residential expansion, and employment core in the area of Ninau Street/Lipoa Parkway, lie outside the 1/4 mile walk shed radius. Either additional transit stops should be provided, or an on-site shuttle to transit stops, which should be entirely financed by the Project, should be considered.

The Project should make a strong commitment to a transportation demand management (TDM) plan not only because Smart Growth embraces TMD policies but also because TDM is identified as an integral part of transportation planning per the *County of Maui 2030 General Plan Countywide Policy Plan* (see Page 4 of Appendix E). However, the DEIS simply states that certain TDM measures are "being considered" by the Project. Additionally other TDM measures should be provided other than those cited as being considered in the DEIS. These include providing subsidized transit passes for residents and employees of MRTP (75% is generally considered a reasonable subsidy level); information kiosks with transit schedules, transit route information, and bike route maps; and, providing preferential parking for carpoolers and vanpoolers.

The project claims to be a Smart Growth project incorporating Smart Growth principles. However, there are many features that should be incorporated so that MRTP would truly be a Sustainable Community.

Specific Comments to the DEIS:

1. The Project Description in the DEIS must be revised to state the maximum traffic that each phase of the Project would generate (average daily trips, a.m. peak-hour inbound trips, a.m. peak-hour outbound trips, p.m. peak-hour inbound trips, p.m. peak-hour outbound trips). The maximum trip generation for each phase of the Project will need to be a condition in the forthcoming discretionary permit(s) issued for MRTP, and the trip generation of the site will need be monitored by the County of Maui as the site develops to ensure compliance with this permit condition. Otherwise, if the Project were to develop and generate more traffic than evaluated in the TIAR, then the DEIS may not disclose all the project's impacts.
2. Page 15, Roadways: The DEIS recommends "certain improvements be constructed with Phase I of the Project" and that one of these improvements is, "Traffic signal timing adjustments at the Liloa Drive / Lipoa Street intersection to improve operation." How is traffic signal timing an improvement that would be constructed? What specifically regarding the traffic signal timing should be adjusted at this location?
3. Page 15, Roadways: The DEIS recommends as a Phase 1 improvement, " If feasible, construct a second access onto Piilani Highway from MRTP at the permitted access point near East Waipuilani Road." This improvement was assumed in the Year 2024 with Project analysis in the TIAR. If there is a chance that this improvement is not feasible, then the TIAR should

provide an alternate analysis without this improvement in place; otherwise, the Project's effects on other access points along Pi'ilani Highway may be underestimated.

4. Page 16, Roadways: Please clarify what is meant by the phrase in the first sentence on this page, "...the creation of additional westbound westbound routes into the MRTTP..."

5. Page 16, Roadways: The DEIS recommends as a Phase 2 improvement, "If feasible and deemed to be of significant benefit at the time Phase 2 is undertaken, construct a third access onto Piilani Highway at the permitted access point near the old Welakahao Road intersection." The TIAR should provide an analysis both with and without the intersection of Old Welakahao Road/Pi'ilani Highway as an access point. Otherwise, the Project may have impacts not disclosed in the DEIS.

6. Page 74 of the DEIS states, "The implementation of the Master Plan Update will be over the course of years and as market conditions warrant" and that development will continue as current County ordinances prescribe and as demand arises. If this is the case, then this project cannot be assumed to be a Smart Growth project over the course of the project's development. For example, if market conditions for housing were strong and Research & Development demand were low, then it is anticipated, based on this statement in the DEIS, that the project would develop initially with only housing. If this were to happen, then this phase of the project could not be considered Smart Growth. Therefore, this project should not be allowed to develop as market conditions warrant. Instead, the project should be required to develop with a mix of uses that would ensure it adheres to the principles of Smart Growth.

7. Page 141 and Page 147 of the DEIS (and Page 17 of the TIAR): The DEIS and the TIAR should be revised to account for the fact that the roundabout at the intersection of Piikea Avenue/ Liloa Drive is completed and is fully operational.

8. Page 146 of the DEIS (and Page 15 of the TIAR) states, "...it is assumed that the north-south collector roadway (an extension of the existing Liloa Drive) would be in place by 2024 due to its presence in the six-year Capital Program." Although the north-south collector roadway is listed in the six-year Capital Program, that does not guarantee there will be sufficient funding for the project to be constructed. An alternative analysis that assumes the north-south collector is not constructed should be provided.

9. Page 146 of the DEIS (and Page 15 of the TIAR) indicates the following other project's traffic were included in the Year 2024 volumes:

- Kihei High School
- Piilani Promenade
- Maui Lu Resort
- Kenolio 6
- Kaiwahine Village
- A&B N. Kihei Residential
- Honua'ula
- Wailea Resort

- Makena Resort

A brief description of each of these development projects should be provided in the TIAR. What is the trip generation of each of these projects and what is the trip assignment of each of these projects on the local roadway network? Where are these development projects located relative to the MRTP site? Figures containing this information should be provided in the TIAR.

10. Page 151 of the DEIS (and Page 17 of the TIAR) states, "Based on the assumed background growth projections, the following improvements are recommended to be implemented by year 2024 to address the without project conditions:

- Complete Liloa Drive continuously between Kaonoulu Street and Kanani Road as a two-lane roadway; and
- At the intersection of Piilani Highway/East Welakahao Road, observe queuing at the East Welakahao approach left turn to determine the extent to which the northbound Piilani Highway refuge lane is utilized."

How is observing queuing a recommended improvement? What improvement is suggested at Pi'ilani Highway/East Welakahao Road?

11. Based on the information in the TIAR, Phase 1 of the Project would have a significant impact at Pi'ilani Highway/East Welakahao Road by substantially increasing the delay experienced by the eastbound left turn at this intersection. This location needs to be signalized to mitigate the Project's impact. The Project should either install this traffic signal or wait to construct Phase 1 of the Project until a traffic signal is installed by others at this location.

Additionally, Phase 1 of the Project should not move forward until the North-South Collector Street is constructed from Ka'ono'ulu Street and Kanani Road as a two lane roadway. Otherwise, the Project would have impacts that are not disclosed in the DEIS.

12. Page 154, Table 8; and, Page 166 - 167, Tables 12 and 13 of the DEIS: As discussed elsewhere in this comment letter, the trip generation estimated for the Project is too low due to an unreasonably high internal trip capture and mode split assumed.

13. Page 154, Table 9; and Page 168, Table 14 of the DEIS; and, Page 25, Table 4 and Page 41, Table 9 of the TIAR: The percentages shown in these tables are too low because the DEIS and its TIAR underestimates the Project's trip generation.

14. Page 159 of the DEIS(and Page 31 of the TIAR) states, "Based on the operational analyses of intersections, the following are recommended to be implemented with Phase 1 to mitigate the project's impact:

At the intersection of Piilani Highway and Lipoa Parkway:

1. Construct an additional southbound Piilani Highway left turn lane (two total);
 - a. Widen westbound Lipoa Parkway to provide for left, through, and right turn lanes;

- b. Widen and/or restripe eastbound Lipoa Street to provide left, through, and right turn lanes;
2. Adjust the signal timing at the intersection of Liloa Drive and Lipoa Street to better serve the anticipated traffic pattern; and
3. Connect Hookena Street, as a two-lane roadway to Piilani Highway as a right in/right out.

15. What exact signal timing changes are proposed at the intersection of Liloa Drive/Lipoa Street? Also, Page 15 of the DEIS indicates the connection of Hookena Street may not be feasible. If there is any chance that it is not feasible, then an analysis should be provided without this improvement in place; otherwise the Project would have impacts not disclosed in the DEIS. Finally, what measures will be taken to ensure the connection at Hookena Street will be a right in/right out access and vehicles will not turn left at this access point?

16. Page 160 of the DEIS (and Page 32 of the TIAR) states, "To address Year 2034 without and with Project conditions, it is assumed that the following infrastructure improvements are in place prior to the development:

1. The Liloa Drive extension would be in place between Kaonoulu Street and Kanani Road.
2. Kihei Upcountry Road will be in place."

Unless MRTP is willing to construct these improvements, any improvements assumed to be in place in the Year 2034 scenario must be fully constructed before the MRTP is issued any building permits for Phase 2; otherwise, the Project would have traffic impacts not disclosed in the DEIS, and the DEIS would not have been prepared in accordance with Chapter 11-200, Hawaii Administrative Rules (HAR). The DEIS should be revised to indicate Phase 2 will not move forward until these improvements are in place.

17. Page 176 of the DEIS and Page 60 of the TIAR state with respect to Phase 2 of the Project, "The project impacts the Piilani Highway/Piikea Avenue and Liloa Drive/Piikea Avenue intersections but accounts for a relatively small percentage of the total peak hour traffic." It is not material that the project accounts for a relatively small percentage of the total peak hour traffic. These are cumulative impacts that should be mitigated by the proposed project. Propose mitigation and pay a fair share towards the improvements that would mitigate these impacts.

18. Page 165 and Page 177 of the DEIS and Page 37-38 of the TIAR state, "Determine whether the addition of an additional left turn lane for the EB Piikea approach and/or the northbound Piilani approach is appropriate to address the capacity issues at the intersection of Piilani Highway/Piikea Avenue. How is "determine" a mitigation or improvement? Also, should the "and/or" in this sentence be an "and" or an "or?" The DEIS and its TIAR should state precisely what improvements are required.

19. Page 165 and Page 177 of the DEIS and Page 37-38 of the TIAR state, "Examine potential methods to increase capacity of the roundabout at the intersection of Liloa Drive/Piikea Avenue." How is "examine potential methods" an improvement? What improvements should be

made to increase the capacity of the roundabout so it operates at acceptable LOS? It is the responsibility of the TIAR to determine this based on the forecast volumes at this roundabout.

20. Page 165 and Page 177 of the DEIS; and, Page 37-38 of the TIAR, state the following are recommended to be implemented by the year 2034, subject to verification that the improvements are warranted, with updated traffic engineering studies at the time of implementation:

1. Construct the mauka collector as a two-lane roadway between Mokulele Highway and a point somewhere south of MRTP on Piilani Highway.
2. Determine whether the addition of an additional left turn lane for the EB Piikea approach and/or the northbound Piilani approach is appropriate to address the capacity issues at the intersection of Piilani Highway/Piikea Avenue.
3. Examine potential methods to increase capacity of the roundabout at the intersection of Liloa Drive/Piikea Avenue.

Who will pay for these "improvements?" If the MRTP is not willing to pay for and construct them, then it must wait to pull building permits for Phase 2 until these improvements are constructed; otherwise, the Project will have significant traffic impacts not disclosed in the TIAR. Alternatively, the TIAR should provide an analysis without these improvements in place and disclose the Project's impacts in the event these improvements are not constructed.

21. Page 178 of the DEIS (and Page 56 of the TIAR): The DEIS states, "Based on the operational analyses of intersections, the following are recommended to be implemented with Phase 2 to mitigate the project's impact:

1. Construct the portion of the mauka collector within the MRTP property".

The construction of the ENTIRE mauka collector from Mokelele Highway to a location south of the MRTP would mitigate the Project's impacts to Pi'ilani Highway. In the event this new roadway is not constructed, the Project would have significant, unmitigated impacts not disclosed in this DEIS. No portion of the Project past Phase 1 should be constructed until the construction of the entire mauka collector is assured. The DEIS should be revised to indicate this.

22. Page 178: Given this project's claims to be a Smart Growth project and the implementation TDMM are consistent with the *County of Maui 2030 General Plan Countywide Policy Plan*, the Project should make a strong commitment to TDM measures. Therefore, the clause, "The following Transportation Demand Management Measures (TDMM) are being considered" should be revised to, "The following Transportation Demand Management Measures (TDMM) will be implemented by the MRTP ."

23. Page 179, Alternate Access Methods: The phrase, "The following methods of consolidating trips should be considered" should be revised to state, ""The following methods of consolidating trips shall be implemented by the MRTP."

24. Page 180, North-South Greenway: The text indicates an 8 foot wide "walkway" would be provided for bicycle and pedestrian travel, but Cross Section B on Page 185 shows a bicyclist riding in the street, sharing a lane with an automobile. This inconsistency should be resolved. Also, please clarify what is meant by "walkway." Is a walkway a concrete sidewalk? Asphalt sidewalk? Decomposed granite?

25. Page 180, North-South Greenway: Separate on-street bicycle lanes should be provided on North-South Greenway with reverse angle parking considered to eliminate parked vehicles' doors from opening onto bicyclists.

26. Page 182, Bicycle and Pedestrian Improvements: The DEIS states, "...a substantial number of infrastructure improvements are proposed to make MRTP pedestrian and bicycle-friendly." Few bicycle infrastructure improvements are proposed that would make the Project bicycle-friendly. Requiring bicyclists to share such narrow lanes with automobiles and bicyclist having to worry about parked vehicles opening doors on them is not bicycle-friendly. Additionally, the Project is not proposing any amenities, such as bicycle lockers, showers, etc., that would create a bicycle friendly development.

27. Page 183: The typographical error in the first word on this page, "idewalks" should be replaced with the word "Sidewalks."

28. Page 183, The DEIS states, "Internal streets will be small in scale with narrow pavements to calm vehicle traffic and make it safer for bicycles to share the road with cars.. ." Dedicated bicycle lanes should be provided on all new collector streets within the MRTP site, as well as on Lipoa Parkway.

29. Page 183: The DEIS states an east-west pedestrian trail would be established to facilitate a future linkage with the bicycle/pedestrian trail on Liloa Drive. Based on Figure 39, it appears this trail would not be located at an existing intersection on Pi'ilani Highway but instead would be north of the intersection of Pi'ilani Highway/ E. Waipulani Road. How will pedestrians and bicyclists utilizing this new trail cross Pi'ilani Highway? Would the trail go under Pi'ilani Highway? Who would pay for and construct whatever's necessary for the pedestrians/bicyclists to cross Pi'ilani Highway? These issues should be discussed in the DEIS.

30. Page 184 - 187, Cross sections: It is commendable that the DEIS provides detailed cross sections of proposed streets. It is particularly commendable that pedestrian friendly features such as non-contiguous sidewalks, street trees, and wide parkways, and landscaped medians are proposed. However, the Project roadway network lacks sufficient on-street bike lanes to promote connectivity within the Project site, and given the trip generation of the MRTP, the provision of such dedicated bicycle lanes is warranted. In addition to the 6' wide bicycle lanes proposed on Lipoa Parkway, 6' wide dedicated bike lanes should also be proposed on North and South Ninau St, Ho'okena Street, North and South Holopono Street, and all "connector" streets. Including on-street bike lanes along these streets would help promote a multi-modal community; without these bike lanes this project cannot claim it is a Smart Growth project. Figure 39, Pedestrian and Bicycle Plan, should be revised accordingly.

31. Page 184, Cross section A3, Lipoa Parkway: Minimum 11' travel lanes should be proposed rather than the 10' wide lanes shown on this cross section, since 10' wide travel lanes are too narrow and the potential for the incidence of automobile side-swipe collisions would increase.

32. Page 187, Cross section E, Local Street: This cross section should be revised to provide minimum 9 foot wide travel lanes, rather than 8 foot travel lanes, for a total curb-to-curb width of 32 feet. A 30 foot wide pavement width is too narrow to safely allow two-way traffic and yet accommodate automobile parking on both sides of the street.

33. Page 188, Figure 38, Transit Circulation Plan: What is meant by a "key" transit stop? Does this mean other transit stops will be provided on the site? What type of amenities will be provided at transit stops (e.g., bus shelters, benches, trash cans)? Who would pay for these amenities? If these amenities are not provided, is it fair to call this a transit friendly site and one that incorporates smart growth principles?

34. Page 188-189, Figures 38 and 39: Why do these figures show a "school connection" when other portions of the DEIS indicate this connection may not be feasible? If the connection between MRTP and the future Kihei High School may not be feasible, shouldn't Figures 38 and 39 be revised to say, "Potential School Connection?"

Specific Comments to Preliminary Engineering & Drainage Report (Appendix F of the DEIS):

35. Figure 5-6: Please clarify what the different symbols and colors mean that are used on this figure, as a legend was not provided.

36. Page 7-1: A document entitled, "Calthorpe Associates, Chris Hart & Partners, Maui Research & Technology Partners, "Maui Research and Technology Park Development Code," December 10, 2010," is cited as a reference and appears as a footnote throughout the report. What document is this?

Specific Comments to the TIAR (Appendix G of the DEIS):

37. The TIAR should be signed and stamped by a Licensed Professional Engineer from the State of Hawai'i to ensure that an individual knowledgeable in the area of transportation engineering completed the work, or reviewed the document and agrees with the content of the document.

The TIAR should be also revised to address the following comments:

38. An HCM arterial analysis should be performed for Pi'ilani Highway in all analysis scenarios to demonstrate that Pi'ilani Highway would operate at an acceptable LOS.

39. An HCM arterial analysis should be performed for the "mauka collector" both as a two lane facility and a four lane facility in the Year 2034 analysis scenario to demonstrate that this roadway would operate at an acceptable LOS with the Project in place.

40. The effects of the Project on the capacity of Mokulele Highway should be evaluated.

41. The TIAR should analyze and determine what the minimum lengths of the left turn pockets will need to be to adequately accommodate the left turn demand at intersections along Pi'ilani Highway for each project phase. Similarly, the TIAR should analyze and determine the minimum acceleration and deceleration lanes that would be required. If these turn pockets or acceleration/deceleration lanes are not designed long enough, public health and safety may be compromised.

42. The TIAR should analyze all assumed project access points along the future mauka roadway, and it should depict these intersections, their traffic volumes, their lane configurations, and their type of control (e.g., signal, one-way stop) on appropriate figures in the TIAR.

43. The Project should install hardwire traffic signal interconnect between all traffic signals along its frontage on Pi'ilani Highway and any proposed signalized access points on the future Mauka Collector to ensure signals along these roadways may be coordinated without having their controller's clock's drift. This should be described in the TIAR and the DEIS.

44. How many pedestrian calls per hour (not pedestrians per hour) were assumed in the Synchro intersection analyses? Numerous pedestrian calls per hour can degrade the LOS at an intersection significantly. The number of pedestrian calls per hour should be shown in the Synchro intersection analysis data sheets provided in the appendix of the TIAR. It would be expected that there would be many pedestrians crossing Pi'ilani Highway with the construction of this project.

45. Page 4, Pi'ilani Highway: According to HDOT count data (Attachment G), the Pi'ilani Highway is a primary arterial, not a major arterial as indicated in the TIAR.

46. Page 7, Existing Traffic Volumes: The TIAR indicates existing counts were taken on November 18, 2010. Since November is low tourist season, using these counts in the analysis may be providing an inaccurate baseline and may result in non-disclosure of all the project's significant traffic impacts.

47. Page 15, The TIAR says it assumes the North-South Collector roadway would be in place by 2024 due to its presence in the six year Capital Program. According to the Maui County Capital Program, Phase 2 of the North-South Collector would be constructed by Fiscal Year 2018. However, this funding is not assured nor has an environmental document for this roadway been prepared and approved. Therefore, the North-South Collector may not be constructed by Year 2024. If the project begins to develop as soon as it obtains its entitlements in Year 2014, then how much of the project may be constructed before it has impacts that would necessitate the construction of the North-South Collector? This is the amount of the Project that may be constructed prior to the construction of the North-South Collector. In the event the TIAR is not revised to address this question, then the applicant must not be issued any building permits until the North-South Collector is constructed.

48. Page 15, Without Project, Projected Year 2024 Background Traffic: The TIAR states, "The Year 2024 background traffic volumes were derived using existing traffic along with trip

generation obtained from the Maui Travel Demand Forecasting Model." What exactly is meant by this? Was an annual growth factor determined using the Maui Travel Demand Forecasting Model and then the existing traffic volumes increased accordingly? If so, what annual growth factor was used? Provide supporting documentation so that this growth rate may be validated. Also, what year was the Maui Travel Demand Forecasting Model approved by HDOT and what is the Horizon Year of this travel forecast?

49. Page 15, Without Project, Projected Year 2024 Background Traffic: The TIAR indicate the future Year 2024 background traffic "assumes the presence of" certain other developments. How exactly does it assume this? Were the other development project's traffic manually added in to obtain the Year 2024 volumes or were the other development projects already accounted for in the Maui Travel Demand Forecasting Model? If the answer is the latter, please provide documentation so this may be validated.

50. Page 17: The TIAR states the intersection of Liloa Drive and Lipoa Street, "appears to be fully actuated currently." The TIAR in the same paragraph also states, "The signal may need to be adjusted to provide a longer cycle length to accommodate additional north-south through traffic." If indeed the signal is fully actuated and not coordinated (as indicated it is not in the Synchro analysis sheet in the appendix of the TIAR), then the signal's cycle length would automatically be increased in response to increased traffic; therefore, the signal would not need to be adjusted.

51. Page 22 and Page 39: The 5% transit share mode split is too high, particularly for the Year 2024 scenario which it was assumed the Maui Bus system will continue to operate within the Kihei area with multiple routes at a frequency of one per hour with only there being a possibility of increased frequency at that time, as indicated on Page 21 of the TIAR. Given the capacity of a Maui bus is about 65 passengers (45 seats and standing room for 20 additional passengers. See Attachment H), at a frequency of one bus per hour, the 5% transit mode split would exceed the capacity of the bus itself, even assuming there were no passengers already on the bus when it stopped on the MRTP site. It would be incorrect to assume a frequency any higher than existing since funding is not in place for such service in the future.

52. Page 22, Table 3; Page 39, Table 7; and, Page 40, Table 8:

- The text of the TIAR states, "Internal capture rate was devised using ITE methodology," but it does not state the percentage assumed. What percent internal capture rate was used? This percentage should be indicated in the TIAR. Additionally, copies of the ITE worksheets used to determine the amount of internal capture should be provided in an appendix of the TIAR; otherwise, the internal capture rates used cannot be validated. ITE worksheets as shown in the *ITE Trip Generation Handbook, 2nd edition* should be used. (See Attachment I for a copy of a blank worksheet from the *ITE Trip Generation Handbook, 2nd edition*.)
- Provide a trip generation table without any reductions for internal capture and mode split, rather than just a trip generation summary table, so it is clear what trip reductions are being taken. See Attachment J for the trip generation for this project without any trip reductions taken. An example of the data that should be shown in the trip generation

tables for a mixed use development, as recommended in ITE's *Transportation Impact Analysis for Site Development* is provided on Page 3 of Attachment C.

- Provide average daily traffic (ADT) for each phase of the development. Providing this information is an easy way to gauge the size of each development phase.
- ITE Land Use Code 750 is "office park" not "retail." An e-mail dated July 9, 2012 from project facilitator Steve Perkins (see Attachment K), indicates ITE Code 814 should be shown in the trip generation tables instead of ITE Code 750.
- The Trip Generation Summary tables should show the specific number of different types of residential land uses proposed and their ITE Land Use Codes rather than showing "various."

53. Page 22, Trip Assignment: The TIAR states, "A summary of regional travel patterns within the Kihei area was created from the Maui travel demand model. MRTP traffic was assigned to the projected roadway network using this distribution." Please describe in more detail how the project trip distribution and assignment were determined. Was a select zone assignment run to determine trip distribution? If not, why not? If so, a copy of it should be included in the appendix of the TIAR so the distribution and assignment may be validated.

54. Page 22, Trip Assignment and Page 40, Trip Assignment: The TIAR states, "Internal traffic was distributed between the residential, hotel, school, employment, and retail commercial land uses."

On what technical basis was it determined how to distribute internal traffic among the hotel and school(s) and other land uses on site? ITE methodology provides internal capture rates among residential, commercial office, and commercial retail land uses only. Also, provide a figure showing this internal traffic distribution.

55. Page 23, Figure 6: Figure 6 depicts the project's traffic assignment. A similar figure should be provided showing the project's trip distribution. It's difficult to validate the project's trip assignment without being provided a trip distribution figure.

56. Page 25, Table 4: A footnote should be added to this table to let the reader know what the abbreviation "BG" means.

57. Page 29: The TIAR states, "The intersection of Pi'ilani Highway and Lipoa Street/Lipoa Parkway is projected to require double southbound Pi'ilani left turns and widening of the eastbound and westbound Lipoa approach." How long will the southbound dual left turn lanes need to be to prevent vehicles in these lanes from spilling out into the through lanes thereby increasing the potential for rear end collisions on Pi'ilani Highway?

58. Page 37: The TIAR states that to address without Project Year 2034 conditions the mauka collector should be constructed between Mokulele Highway to a point on Pi'ilani Highway south of MRTP. What are some possible points on Pi'ilani Highway the southern terminus of the mauka collector could intersect Pi'ilani Highway?

59. Page 39: The TIAR states Table 7 summarized the trips generated by the Project which can be accommodated by a 2-lane mauka collector. Provide technical data so this may be validated.

Also, what capacity was assumed for the 2-lane mauka collector? Finally, is a mauka roadway assumed in the Year 2035 roadway network in the travel forecast currently underway by HDOT for the Maui County Long Range Land Transportation Plan?

60. Page 40, Trip Assignment: The TIAR states, "The traffic generated by the proposed MRTTP Development was directionally distributed and assigned to the future roadway network." How was it decided how to distribute and assign the Project trips? Was a Select Zone Assignment run? If so, include a copy of it in an appendix of the TIAR so the distribution may be validated; if not, provide technical data supporting the distribution assumed.

61. Page 40, Trip Assignment: The TIAR states, "The four-lane mauka collector can support more MRTTP than the two-lane configuration." How much more traffic can it support? What was the assumed capacity of both the two-lane and four-lane configuration (peak hour and ADT)?

62. Page 59, TDM Measures: The TIAR says a TDM measure is to, "Encourage alternate work schedules and off peak hours for employment generators." How will this be encouraged?

63. Page 60: The TIAR states, "The project impacts the Pi'ilani Highway/Piikea Avenue and Liloa Drive/Pi'kea Avenue intersections but accounts for a relatively small percentage of the total peak hour traffic." Identify mitigation for these impacts and pay a fair share for the mitigation.

64. Page 60: The TIAR states, "Analysis of projected 2020-2034 conditions indicates that a four-lane mauka collector road will likely be warranted sometime in the Buildout of Phase 2." Provide all data supporting this statement so it may be validated. Also, how much of Phase 2 may be constructed before a four-lane mauka roadway is required? The Project cannot develop beyond this point or it would have traffic impacts not disclosed in the DEIS.

Specific Comments to the Air Quality Study (Appendix L of the DEIS):

65. Page 14: The Air Quality Study says, "Project construction activities will also likely obstruct the normal flow of traffic at times to such an extent that overall vehicular emissions in the project area will temporarily increase. The only means to alleviate this problem will be to attempt to keep roadways open during peak traffic hours and to move heavy construction equipment and workers to and from construction areas during periods of low traffic volume. Thus, most potential short term air quality impacts from project construction can be mitigated." Why doesn't MTRP attempt to mitigate its short term impacts to air quality resulting from vehicular emissions by keeping roadways open (particularly Pi'ilani Highway) during peak traffic hours and utilize off-peak traffic hours to move heavy equipment and construction workers during non-peak traffic hours?

66. Page 15: The Air Quality Study says, "It is estimated that carbon monoxide emissions, for example, will go down by an average of about 20 percent per vehicle during the next 10 years due to the replacement of older vehicles with newer models." While this estimation does not seem unreasonable, based on what data was this estimation made? Supporting data should be provided in the Air Quality Study.

67. Air quality impacts are underestimated due to the TIAR's underestimate of the Project's traffic. The same comment applies to noise impacts.

Final Remarks:

To summarize, the proposed Project as presented in the DEIS does not exhibit all the principles of Smart Growth. Furthermore, the DEIS fails to disclose all traffic impacts of the project. Because the DEIS fails to disclose all traffic impacts, it may also fail to disclose impacts to other related issues areas (e.g., noise, air quality). The DEIS should be revised to ensure all impacts of the Project are disclosed as required by the Hawai'i Environmental Protection Act.

Thank you once again for providing me the opportunity to review and comment on the DEIS. I hope you find these comments helpful in producing a legally defensible environmental document.

Sincerely,



Victoria A. Huffman, P.E.

Attachments

cc: Steve Perkins, Maui R & T Partners, LLC (electronic copy)
Michael Summers, Chris Hart & Partners, Inc. (electronic copy)

Acceptable LOS

| Intersection | | | | |
|------------------------------|-------|-------|-------|-------|
| Intersection Delay (sec/veh) | 28.6 | | | |
| Intersection LOS | D | | | |
| Approach | EB | WB | NB | SB |
| Entry Lanes | 1 | 1 | 1 | 1 |
| Conflicting Circle Lanes | 1 | 1 | 1 | 1 |
| Adjusted Approach Flow (vph) | 312 | 446 | 676 | 575 |
| Demand Flow Rate (pc/h) | 318 | 455 | 689 | 586 |
| Vehicles Circulating (pc/h) | 578 | 736 | 353 | 447 |
| Vehicles Exiting (pc/h) | 455 | 306 | 543 | 744 |
| Follow-Up Headway (s) | 3.186 | 3.186 | 3.186 | 3.186 |
| Ped Vol. Crossing Leg (#/hr) | 0 | 0 | 0 | 0 |
| Ped Capacity Adjustment | 1.000 | 1.000 | 1.000 | 1.000 |
| Approach Delay (sec/veh) | 14.0 | 37.2 | 31.1 | 27.1 |
| Approach LOS | B | E | D | D |
| Lane | Left | Left | Left | Left |
| Designated moves | LTR | LTR | LTR | LTR |
| Assumed Moves | LTR | LTR | LTR | LTR |
| Right Turn Channelized | | | | |
| Lane Utilization | 1.000 | 1.000 | 1.000 | 1.000 |
| Critical Headway (s) | 5.193 | 5.193 | 5.193 | 5.193 |
| Entry Flow Rate (pc/h) | 318 | 455 | 689 | 586 |
| Capacity, Entry Lane (pc/h) | 634 | 541 | 794 | 723 |
| Entry HV Adjustment Factor | 0.982 | 0.981 | 0.981 | 0.981 |
| Flow Rate, Entry (vph) | 312 | 446 | 676 | 575 |
| Capacity, Entry (vph) | 622 | 531 | 779 | 709 |
| Volume to Capacity Ratio | 0.502 | 0.841 | 0.868 | 0.811 |
| Control Delay (sec/veh) | 14.0 | 37.2 | 31.1 | 27.1 |
| Level of Service | B | E | D | D |
| 95th-Percentile Queue (veh) | 3 | 9 | 11 | 9 |

HCM 2010 Roundabout
22: Liloa Drive & Piikea Avenue

2024 With Project PM
12/20/2011

Unacceptable LOS

| Intersection | | | | |
|------------------------------|-------|-------|-------|-------|
| Intersection Delay (sec/veh) | 37.7 | | | |
| Intersection LOS | E | | | |
| Approach | EB | WB | NB | SB |
| Entry Lanes | 1 | 1 | 1 | 1 |
| Conflicting Circle Lanes | 1 | 1 | 1 | 1 |
| Adjusted Approach Flow (vph) | 312 | 446 | 743 | 613 |
| Demand Flow Rate (pc/h) | 318 | 455 | 758 | 625 |
| Vehicles Circulating (pc/h) | 617 | 805 | 353 | 447 |
| Vehicles Exiting (pc/h) | 455 | 306 | 582 | 813 |
| Follow-Up Headway (s) | 3.186 | 3.186 | 3.186 | 3.186 |
| Ped Vol. Crossing Leg (#/hr) | 0 | 0 | 0 | 0 |
| Ped Capacity Adjustment | 1.000 | 1.000 | 1.000 | 1.000 |
| Approach Delay (sec/veh) | 15.0 | 48.1 | 44.9 | 32.9 |
| Approach LOS | B | E | E | D |
| Lane | Left | Left | Left | Left |
| Designated moves | LTR | LTR | LTR | LTR |
| Assumed Moves | LTR | LTR | LTR | LTR |
| Right Turn Channelized | | | | |
| Lane Utilization | 1.000 | 1.000 | 1.000 | 1.000 |
| Critical Headway (s) | 5.193 | 5.193 | 5.193 | 5.193 |
| Entry Flow Rate (pc/h) | 318 | 455 | 758 | 625 |
| Capacity, Entry Lane (pc/h) | 610 | 505 | 794 | 723 |
| Entry HV Adjustment Factor | 0.982 | 0.981 | 0.981 | 0.981 |
| Flow Rate, Entry (vph) | 312 | 446 | 743 | 613 |
| Capacity, Entry (vph) | 598 | 496 | 779 | 709 |
| Volume to Capacity Ratio | 0.522 | 0.901 | 0.955 | 0.865 |
| Control Delay (sec/veh) | 15.0 | 48.1 | 44.9 | 32.9 |
| Level of Service | B | E | E | D |
| 95th-Percentile Queue (veh) | 3 | 10 | 15 | 10 |

TRAFFIC IMPACT ANALYSIS REPORT WAIALE DEVELOPMENT WAILUKU, MAUI, HAWAII

FINAL

March 21, 2011

Prepared for:

A&B Properties, Inc.
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Honolulu, Hawaii 96813



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Honolulu • Wailuku • Hilo, Hawaii



The project is planned as a mixture of housing, commercial, industrial and school land uses. The multi-use of the Project is aimed at providing close proximity between these land uses to reduce the amount of external trips.

The Institute of Transportation Engineers, Trip Generation Handbook second edition (2004) provides internal capture rates for multi-use developments for the (PM) peak hour of traffic only. Rates provided for retail to/from retail and retail to/from residential were applied. Overall, the internal capture was assumed to account for less than 10 percent of the total Project generated entering and exiting trips during the PM peak hour of traffic. Internal capture was not applied to AM peak hour traffic.

10%

*

Diverted linked trips were also assumed to occur for 4 percent of the trips generated by the Project during the PM peak hour of traffic. This is where commercial trips are considered existing trips (i.e. on Kuihelani Highway) that make intermediate stops at commercial land uses on their way to their final destinations.

TRAFFIC IMPACT ANALYSIS REPORT
HONU'A'ULA
WAILEA, MAUI, HAWAII

FINAL

March 2, 2010

Prepared for:

Honus'ula Partners LLC
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TRAFFIC IMPACT ANALYSIS REPORT
HONU'A'ULA
Wailea, Maui, Hawaii

FINAL

Prepared for

Honus'ula Partners LLC

Prepared by
Austin, Tautsami & Associates, Inc.
Civil Engineers • Surveyors
Honolulu • Waialua • Hilo, Hawaii

March 2, 2010

**Table 6
Project Generated Peak Hour Trips**

| LAND USE | ITE CODE # | Units | Quantity | Avg. Daily Trips | AM Peak Hour | | | PM Peak Hour | | |
|-------------------------------|------------|--------|------------------------------------|------------------|--------------|------------|------------|--------------|------------|-------------|
| | | | | | In | Out | Total | In | Out | Total |
| YEAR 2016 | | | | | | | | | | |
| VMX (General Office Building) | 720 | SF GFA | 26,000 | 940 | 57 | 7 | 64 | 19 | 89 | 108 |
| VMX (Commercial) | 820 | SF GFA | 74,000 | 4978 | 100 | 62 | 162 | 303 | 313 | 616 |
| MF Affordable Housing | 230 | DU | 76 | 601 | 8 | 34 | 42 | 33 | 15 | 48 |
| MF Townhouse | 230 | DU | 40 | 290 | 5 | 20 | 25 | 20 | 9 | 29 |
| GF Detached Housing | PB | DU | 127 | N/A | 35 | 24 | 59 | 30 | 29 | 59 |
| MF Market Rate Villas | PB | DU | 158 | N/A | 15 | 21 | 36 | 28 | 28 | 56 |
| YEAR 2018 | | | | | | | | | | |
| GF Detached Housing | PB | DU | 110 | N/A | 30 | 21 | 51 | 28 | 25 | 53 |
| MF Market Rate Villas | PB | DU | 30 | N/A | 3 | 4 | 7 | 6 | 5 | 11 |
| MF Townhouse | 230 | DU | 60 | 193 | 8 | 33 | 41 | 32 | 14 | 46 |
| MF Affordable Housing | 230 | DU | 200 | 570 | 18 | 66 | 84 | 62 | 39 | 101 |
| YEAR 2022 | | | | | | | | | | |
| GF Detached Housing | PB | DU | 163 | N/A | 44 | 31 | 75 | 38 | 37 | 75 |
| MF Market Rate Villas | PB | DU | 12 | N/A | 2 | 1 | 3 | 3 | 2 | 4 |
| MF Affordable Housing | 230 | DU | 176 | 1047 | 14 | 67 | 81 | 65 | 31 | 96 |
| TOTAL | | | 100,000 SF GFA 1,150 DU | | 338 | 411 | 750 | 685 | 634 | 1319 |

DU = Dwelling Units
SF GFA = Square Feet of Gross Floor Area
SF = Single-Family
MF = Multi-Family
VMX = Village Mixed Use

Source: Institute of Transportation Engineers, Trip Generation, 8th Edition,
Percuss Brinckerhoff's 2006 single-family and multi-family resort residential trip rates.

Internal
Capture
= 15%

IV. FUTURE YEAR TRAFFIC CONDITIONS WITH THE PROJECT

A. Trip Generation

Trip generation estimates the total number of trips produced by a given land use. Trip rates contained in the nationally published ITE, Trip Generation, 8th Edition were used to estimate the number of trips generated by the Project. Additionally, the Resort Residential Trip Generation Rate Development prepared by Parsons Brinckerhoff Quade & Douglas, Inc. dated October 2, 2008 as accepted by the SDOE, is utilized to estimate the number of trips generated by resort residential units. Table 6, as shown in the previous section, shows these trip generation rates and Table 8 shows the number of peak hour trips that are expected to be generated by the Project.

An estimation of the percentage of internal trip capture was obtained from the ITE Trip Generation Handbook, Second Edition, which was determined to be approximately 15 percent. The internal trip capture was only applied to the PM peak hour of traffic since commercial areas are typically closed during the AM peak hour of traffic. The 15 percent internal trip capture rate was applied to the number of residential trips and the result was applied to the commercial trips, in order to match the number of internal trips between the residential areas and commercial areas. Internal trips are assumed within the Project.

B. Trip Distribution

The Project generated trips were distributed based on the distribution utilized by the Maui Travel Demand Forecasting Model. Figure 8 shows the general distribution. Phase I of the Project proposes to construct the east leg of the Pihani Highway/Wailua Drive intersection and Kaula Street will be extended into the Project. Since Kaula Street is a private street, it is planned to be gated within the Project site to address concerns of current owners along the street. Phase II of the Project proposes to extend Pihani Highway, forming the south leg of the Pihani Highway/Wailua Drive intersection. Figures 9, 10, and 11 show the Project generated traffic volumes during Year 2016, 2018, and 2022, respectively.

Attachment
C
1 of 3

Transportation Impact Analyses for

Site Development



Institute of Transportation Engineers

An ITE Recommended Practice

2. Initiating Transportation Impact Studies

Guidelines for Studies

In considering the transportation aspects of land development, it is important to determine early in the process if and when a transportation impact study is needed.

Transportation impact studies are currently being addressed in a variety of ways by jurisdictions throughout North America. A cross sampling of data collected by ITE shows the following situations or thresholds that commonly trigger a requirement for a transportation impact analysis:

- When development will generate a specified number of daily trips (the data collected by ITE found examples of 500, 750, 1,000, 2,000 and 3,000 vehicle trips per day, with 1,000 vehicle trips per day predominating);
- When development will generate a specified number of peak-hour trips (examples include 20, 30, 50, 75, 100, 150, 200 and 500 vehicle trips per peak hour, with peak-hour trips in the 50-100 range predominating);

A trip is defined as a single or one-directional travel movement with either the origin or the destination of the trip inside the study site.

- When a specified amount of acreage is being rezoned (examples include a wide variety of acreage based on type of land use; see Florida Department of Transportation 1997 and Georgia Department of Community Affairs 2002 for specific examples);
- When development contains a specified number of dwelling units or amount of square footage (examples include a wide variety of units and square footages based on type of land use; see Florida Department of Transportation 1997 and Georgia Department of Community Affairs 2002 for specific examples);
- When financial assessments are required and the extent of impact must be determined;

- When the development will require a significant amount of transportation improvements;
- When a previous transportation impact analysis for a site has been deemed out of date;
- At the judgment or discretion of staff, based upon unusual circumstances; or
- When development will occur in a sensitive area.

There is little consistency in specific threshold quantities for the first four criteria. Study requirements should be related to the cause of transportation needs and impacts, such as trips generated during peak or design hours.

A quantitative threshold for requiring a site transportation impact study should be established by each agency based on local needs, issues and policies. The threshold level may vary among agencies in response to local conditions and priorities. *In lieu of other locally preferred thresholds*, it is suggested that a transportation impact study be conducted whenever a proposed development will generate 100 or more added (new) trips during the adjacent roadways' peak hour or the development's peak hour. This site trip generation threshold is appropriate for the following reasons:

An additional 100 vehicles per hour can change the level of service or appreciably increase the volume-to-capacity ratio of an intersection approach; and

- Left- or right-turn lanes may be needed to satisfactorily accommodate site traffic without adversely affecting through (non-site) traffic.

It should be noted, however, that many jurisdictions in more densely populated areas tend to use lower thresholds for initiating a transportation impact analysis. These thresholds fall in the range of 30 to 100 peak-hour trips.

Judgment must also enter into the process. In some cases, although a development might generate fewer trips than the established threshold, a localized

Table 5-4. Site Vehicle Trip Generation for Mixed Use Development – sample table

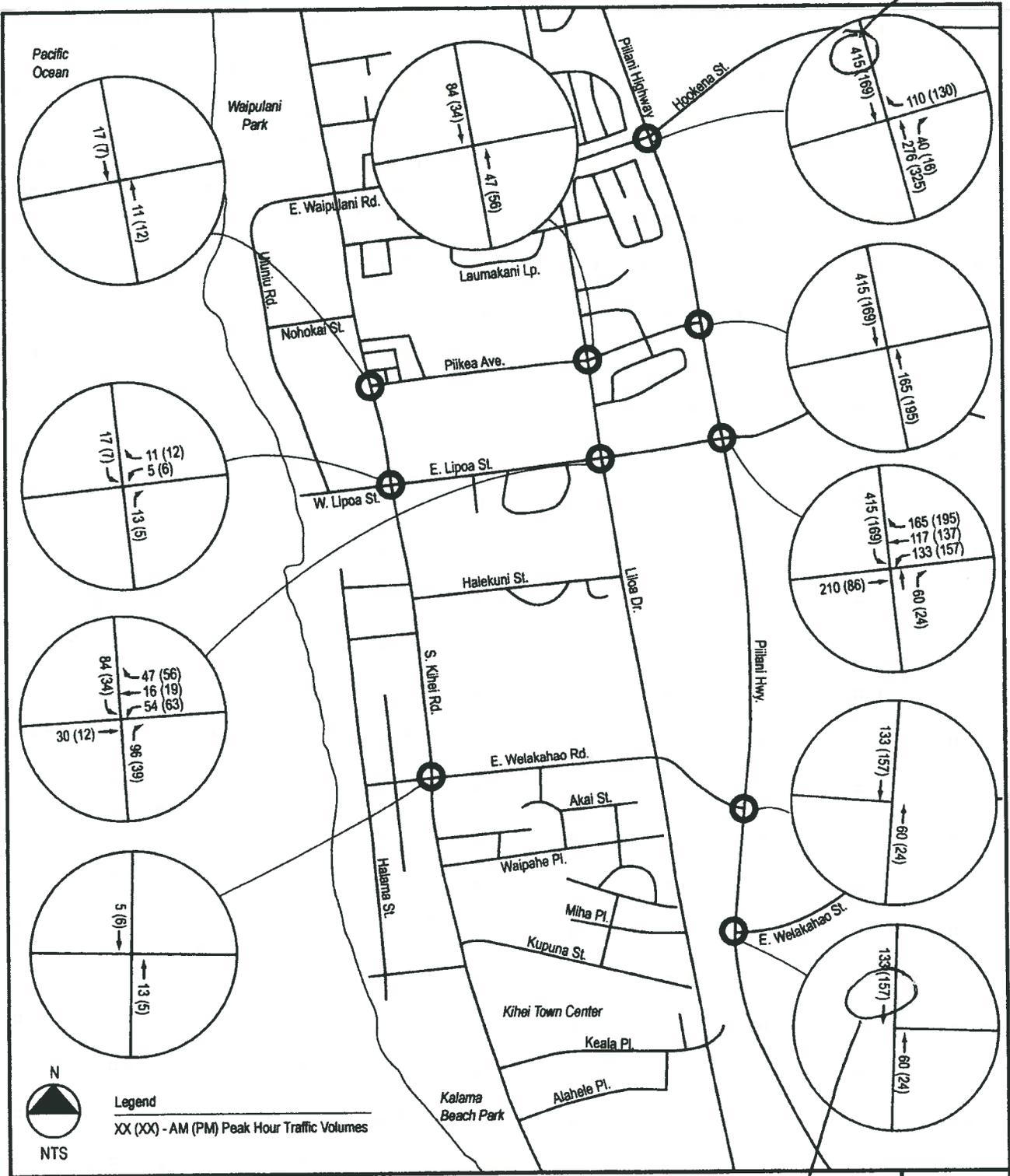
| Land Use (ITE Code) | Intensity | Daily | | A.M. Peak | | P.M. Peak | |
|--|----------------|-------|-------|-----------|-----|-----------|-----|
| | | In | Out | In | Out | In | Out |
| High-Rise Apartment (222) | 286 units | 649 | 649 | 21 | 64 | 62 | 40 |
| Internal Capture | | 208 | 170 | 3 | 3 | 19 | 15 |
| New External | | 441 | 479 | 18 | 61 | 43 | 25 |
| New External Alternative Mode ^a | 24% | 106 | 115 | 4 | 15 | 10 | 6 |
| New External Personal Vehicle | 76% | 335 | 364 | 14 | 46 | 33 | 19 |
| High-Rise Residential Condominium/ Townhouse (232) | 286 units | 651 | 651 | 21 | 90 | 70 | 43 |
| Internal Capture | | 209 | 171 | 3 | 4 | 22 | 17 |
| New External | | 442 | 480 | 18 | 86 | 48 | 26 |
| New External Alternative Mode ^a | 24% | 106 | 115 | 4 | 21 | 12 | 6 |
| New External Personal Vehicle | 76% | 336 | 365 | 14 | 65 | 36 | 20 |
| Shopping Center (820) | 22,999 sq. ft. | 1,325 | 1,325 | 41 | 26 | 114 | 124 |
| Internal Capture | | 119 | 146 | 2 | 2 | 10 | 14 |
| Pass-By | 60% | 724 | 707 | 0 | 0 | 62 | 66 |
| Pass-By Alternative Mode ^a | 24% | 174 | 170 | 0 | 0 | 15 | 16 |
| Pass-By Personal Vehicle | 76% | 550 | 537 | 0 | 0 | 47 | 50 |
| New External | | 482 | 472 | 39 | 24 | 42 | 44 |
| New External Alternative Mode ^a | 24% | 116 | 113 | 9 | 6 | 10 | 11 |
| New External Personal Vehicle | 76% | 366 | 359 | 30 | 18 | 32 | 33 |
| Supermarket (850) | 32,748 sq. ft. | 1,826 | 1,826 | 54 | 35 | 193 | 186 |
| Internal Capture | | 164 | 201 | 3 | 2 | 17 | 21 |
| Pass-By | 36% | 598 | 585 | 18 | 12 | 63 | 59 |
| Pass-By Alternative Mode ^a | 24% | 144 | 140 | 4 | 3 | 15 | 14 |
| Pass-By Personal Vehicle | 76% | 454 | 445 | 14 | 9 | 48 | 45 |
| New External | | 1,064 | 1,040 | 33 | 21 | 113 | 106 |
| New External Alternative Mode ^a | 24% | 255 | 250 | 8 | 5 | 27 | 25 |
| New External Personal Vehicle | 76% | 809 | 790 | 25 | 16 | 86 | 81 |
| Pharmacy/Drugstore Without Drive Through Window (880) | 14,253 sq. ft. | 638 | 637 | 41 | 28 | 53 | 56 |
| Internal Capture | | 57 | 70 | 2 | 2 | 5 | 6 |
| Pass-By | 53% | 308 | 301 | 21 | 14 | 25 | 27 |
| Pass-By Alternative Mode ^a | 24% | 74 | 72 | 5 | 3 | 6 | 6 |
| Pass-By Personal Vehicle | 76% | 234 | 229 | 16 | 11 | 19 | 21 |
| New External | | 273 | 266 | 18 | 12 | 23 | 23 |
| New External Alternative Mode ^a | 24% | 66 | 64 | 4 | 3 | 6 | 6 |
| New External Personal Vehicle | 76% | 207 | 202 | 14 | 9 | 17 | 17 |
| Total | | 5,089 | 5,088 | 178 | 243 | 492 | 449 |
| Total Internal Capture | | 757 | 758 | 13 | 13 | 73 | 73 |
| Total Pass-By Alternative Mode | | 392 | 382 | 9 | 6 | 36 | 36 |
| Total Pass-By Personal Vehicle | | 1,238 | 1,211 | 30 | 20 | 114 | 116 |
| Total New External Alternative Mode | | 649 | 657 | 29 | 50 | 65 | 54 |
| Total New External Personal Vehicle | | 2,053 | 2,080 | 97 | 154 | 204 | 170 |

Note: Table 5-4 is provided for illustrative purposes only. Please note the data contained in this table are based on old data. The trip generation rates/equations are from ITE's *Trip Generation*, 6th Edition, 1997 and the internal capture and pass-by rates from ITE's *Trip Generation Handbook*, 1st Edition, 2001.

^aFor this urban site, alternative transportation modes reflect a reduction from those rates embedded in the ITE vehicle rates, supported by a local study and other data sources; the approach was approved by the review agency in the early stages of the analysis.

SOURCE: Street Smarts, Duluth, GA, USA.

7100



Year 2024 Project-Generated Traffic Volumes

Figure
6

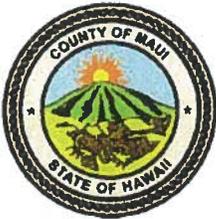
>100

**County of Maui
2030 General Plan
Countywide Policy Plan**



‘A ‘ohe hana nui ke alu ‘ia.

No task is too big when done together by all.



Per capita, sprawl requires more taxpayer support and consumes more land, infrastructure, and natural resources than traditional development patterns.

Enabling urban sprawl can be wasteful and costly. It degrades once-quiet rural communities and devours scenic open spaces. It is responsible for the excessive loss of agricultural lands and natural wildlands. Large-lot, single-family subdivisions consume more land *per capita*, require more taxpayer support *per capita*, and function less efficiently than traditionally scaled neighborhoods. If all of the landscape was developed with a single residence for every 2.5 acres there would be no countryside to enjoy.

3. SMART GROWTH

Currently, best practices emerging in the national planning community deem “Smart Growth” as a good way to mitigate sprawl.



Lana'i City, Lana'i, Hawai'i.

Smart Growth is development that serves the economy, the community, and the environment. Smart growth is about being good stewards of our communities and of our rural lands, parks, and forests. It is about ensuring that the best of the past is preserved, while creating new communities that are attractive, vital, and enduring.⁷

- * { In short, Smart Growth is based on development designed at a scale to be comfortable to a pedestrian, not an automobile. It is also based on appropriately varying development type and massing from the urban core to the rural edge. There are ten key principles of Smart Growth:
1. *Create a range of housing opportunities and choices;*
 2. *Create walkable neighborhoods;*
 3. *Encourage community and stakeholder collaboration;*
 4. *Foster distinctive, attractive communities with a strong sense of place;*
 5. *Make development decisions predictable, fair, and cost effective;*

⁷ Statement of Michael Leavitt, EPA Administrator (2005).

- * {
6. Provide a mix of land uses;
 7. Preserve open space, farmland, natural beauty, and critical environmental areas;
 8. Provide a variety of transportation choices;
 9. Strengthen and direct development towards existing communities; and
 10. Take advantage of compact building design.

Summary

As Maui County adopts subsequent amendments to the General Plan, it will be important to incorporate these key principles and research other land use tools that enhance quality of life.

C. SOCIAL PATTERNS AND HOUSING TRENDS

To understand the goals and aspirations of Maui County's residents, it is important to understand who the people of Maui County are and what social issues impact their lives. This chapter focuses on the population, social patterns, and housing trends of Maui County.

1. POPULATION

Population change is among the most important means to measure growth and its likely impact on land uses in a community. Therefore, it is important to achieve an understanding of the County's population trends to prepare a meaningful and realistic plan for the future.

Population change is among the most important means to measure growth.

The original inhabitants of the islands, the Native Hawaiians, existed in large numbers throughout Maui County. It is estimated that there were 300 villages on Maui, 179 villages on Moloka'i, and 62 villages on Lana'i in 1853.⁸ The population of the Native Hawaiian dwindled over time, largely because of epidemics. Moreover, the immigration of Westerners and plantation workers from around the globe changed the demographic profile of Maui County dramatically. Today, Maui County is one of the most racially and ethnically diverse places in the United States.

A Socio-Economic Forecast generated by the County as part of the General Plan update estimates the 2005 resident and visitor population and projects the 2030 population of each island in the County in Table 2 below.

⁸ Coulter, John W. (1931). *Population and Utilization of Land and Sea in Hawai'i, 1853* (Bishop Museum Press, Honolulu).

Goals, Objectives, Policies, and Actions

- h. Encourage the redevelopment and revitalization of harbors while preserving historic and cultural assets in harbor districts.
- i. Encourage the State to provide adequate facilities for small-boat operations, including small-boat launch ramps, according to community needs.
- j. Support the maintenance and cleanliness of harbor facilities.
- k. Support the redevelopment of harbors as pedestrian-oriented gathering places.

Objective:

5. Improve and expand the planning and management of transportation systems.

Policies:

- a. Encourage progressive community design and development that will reduce transportation trips.
- b. Require new developments to contribute their *pro rata* share of local and regional infrastructure costs.
- c. Establish appropriate user fees for private enterprises that utilize public-transportation facilities for recreational purposes.
- d. Support the revision of roadway-design criteria and standards so that roads are compatible with surrounding neighborhoods and the character of rural areas.
- e. Plan for multi-modal transportation and utility corridors on each island.
- f. Support designing all transportation facilities, including airport, harbor, and mass-transit stations, to reflect Hawaiian architecture.
- g. Utilize transportation-demand management as an integral part of transportation planning. ←
- h. Accommodate the planting of street trees and other appropriate landscaping in all public rights-of-way.

Land Use: 814 Specialty Retail Center

Description

Specialty retail centers are generally small strip shopping centers that contain a variety of retail shops and specialize in quality apparel, hard goods and services, such as real estate offices, dance studios, florists and small restaurants. Shopping center (Land Use 820) is a related use.

Additional Data

The sites were surveyed between the late 1970s and the 2000s in California, Florida, Georgia, New York and Pennsylvania.

Source Numbers

100, 304, 305, 367, 423, 507, 577

Attachment G
1 of 2

Run Date: 2012/05/14

Hawaii Department of Transportation
Highways Division

Highways Planning Survey Section

2011 Program Count - Summary

Town: Maui
Count Type: CLASS

DIR 1: +MP
Counter Type: Tube

Final AADT: 14000
Route No: 31

Site ID: B74003100591

Functional Class: URBAN:PRINCIPAL ARTERIAL - OTHER

Location: Pihani Highway : Kihana Drive > Waile

| TIME-AM | DIR 1 | DIR 2 | TOTAL | TIME-AM | DIR 1 | DIR 2 | TOTAL | TIME-PM | DIR 1 | DIR 2 | TOTAL | TIME-PM | DIR 1 | DIR 2 | TOTAL |
|-----------------------------------|-------|-------|-------|-------------|-------|-------|-------|-------------|-------|-------|-------|-------------|-------|-------|-------|
| DATE : 06/28/2011 | | | | | | | | | | | | | | | |
| 12:00-12:15 | 12 | 16 | 28 | 06:00-06:15 | 64 | 36 | 100 | 12:00-12:15 | 97 | 147 | 244 | 06:00-06:15 | 72 | 78 | 150 |
| 12:15-12:30 | 11 | 14 | 25 | 06:15-06:30 | 66 | 39 | 104 | 12:15-12:30 | 107 | 102 | 209 | 06:15-06:30 | 68 | 106 | 174 |
| 12:30-12:45 | 8 | 6 | 14 | 06:30-06:45 | 100 | 59 | 159 | 12:30-12:45 | 113 | 134 | 247 | 06:30-06:45 | 91 | 110 | 201 |
| 12:45-01:00 | 4 | 9 | 13 | 06:45-07:00 | 121 | 45 | 166 | 12:45-01:00 | 120 | 87 | 207 | 06:45-07:00 | 77 | 80 | 157 |
| 01:00-01:15 | 5 | 13 | 18 | 07:00-07:15 | 85 | 94 | 179 | 01:00-01:15 | 106 | 105 | 211 | 07:00-07:15 | 49 | 98 | 147 |
| 01:15-01:30 | 4 | 4 | 8 | 07:15-07:30 | 138 | 58 | 196 | 01:15-01:30 | 130 | 127 | 257 | 07:15-07:30 | 64 | 76 | 139 |
| 01:30-01:45 | 0 | 9 | 9 | 07:30-07:45 | 202 | 59 | 261 | 01:30-01:45 | 110 | 122 | 232 | 07:30-07:45 | 50 | 68 | 108 |
| 01:45-02:00 | 4 | 7 | 11 | 07:45-08:00 | 202 | 81 | 283 | 01:45-02:00 | 109 | 114 | 223 | 07:45-08:00 | 42 | 40 | 82 |
| 02:00-02:15 | 5 | 7 | 12 | 08:00-08:15 | 178 | 78 | 255 | 02:00-02:15 | 141 | 141 | 282 | 08:00-08:15 | 45 | 47 | 92 |
| 02:15-02:30 | 0 | 5 | 5 | 08:15-08:30 | 133 | 87 | 220 | 02:15-02:30 | 135 | 129 | 264 | 08:15-08:30 | 55 | 56 | 111 |
| 02:30-02:45 | 4 | 5 | 9 | 08:30-08:45 | 172 | 64 | 236 | 02:30-02:45 | 119 | 129 | 248 | 08:30-08:45 | 42 | 61 | 103 |
| 02:45-03:00 | 3 | 5 | 8 | 08:45-09:00 | 130 | 84 | 214 | 02:45-03:00 | 124 | 120 | 244 | 08:45-09:00 | 41 | 40 | 81 |
| 03:00-03:15 | 6 | 11 | 17 | 09:00-09:15 | 110 | 103 | 213 | 03:00-03:15 | 125 | 161 | 286 | 09:00-09:15 | 40 | 66 | 106 |
| 03:15-03:30 | 8 | 2 | 10 | 09:15-09:30 | 118 | 72 | 190 | 03:15-03:30 | 124 | 148 | 272 | 09:15-09:30 | 55 | 56 | 111 |
| 03:30-03:45 | 18 | 8 | 22 | 09:30-09:45 | 117 | 70 | 187 | 03:30-03:45 | 113 | 145 | 258 | 09:30-09:45 | 33 | 59 | 92 |
| 03:45-04:00 | 15 | 9 | 24 | 09:45-10:00 | 133 | 86 | 219 | 03:45-04:00 | 135 | 136 | 271 | 09:45-10:00 | 58 | 56 | 114 |
| 04:00-04:15 | 30 | 10 | 40 | 10:00-10:15 | 98 | 89 | 187 | 04:00-04:15 | 122 | 220 | 342 | 10:00-10:15 | 37 | 66 | 103 |
| 04:15-04:30 | 24 | 4 | 28 | 10:15-10:30 | 111 | 86 | 206 | 04:15-04:30 | 103 | 181 | 284 | 10:15-10:30 | 40 | 46 | 86 |
| 04:30-04:45 | 28 | 6 | 34 | 10:30-10:45 | 110 | 96 | 196 | 04:30-04:45 | 110 | 146 | 255 | 10:30-10:45 | 44 | 56 | 100 |
| 04:45-05:00 | 54 | 4 | 58 | 10:45-11:00 | 107 | 96 | 202 | 04:45-05:00 | 119 | 120 | 239 | 10:45-11:00 | 19 | 31 | 50 |
| 05:00-05:15 | 30 | 18 | 48 | 11:00-11:15 | 77 | 82 | 169 | 05:00-05:15 | 105 | 163 | 268 | 11:00-11:15 | 19 | 80 | 99 |
| 05:15-05:30 | 55 | 15 | 70 | 11:15-11:30 | 103 | 101 | 204 | 05:15-05:30 | 96 | 140 | 236 | 11:15-11:30 | 6 | 40 | 46 |
| 05:30-05:45 | 58 | 20 | 78 | 11:30-11:45 | 83 | 109 | 192 | 05:30-05:45 | 93 | 90 | 183 | 11:30-11:45 | 13 | 27 | 40 |
| 05:45-06:00 | 77 | 16 | 93 | 11:45-12:00 | 115 | 100 | 215 | 05:45-06:00 | 94 | 100 | 194 | 11:45-12:00 | 15 | 10 | 25 |
| AM COMMUTER PERIOD (05:00-06:00) | | | | | | | | | | | | | | | |
| TWO DIRECTIONAL PEAK | | | | | | | | | | | | | | | |
| AM - PEAK HR TIME | | | | | | | | | | | | | | | |
| AM - PEAK HR VOLUME | | | | | | | | | | | | | | | |
| AM - K FACTOR (%) | | | | | | | | | | | | | | | |
| AM - D (%) | | | | | | | | | | | | | | | |
| DIRECTIONAL PEAK | | | | | | | | | | | | | | | |
| AM - PEAK HR TIME | | | | | | | | | | | | | | | |
| AM - PEAK HR VOLUME | | | | | | | | | | | | | | | |
| AM PERIOD (00:00-12:00) | | | | | | | | | | | | | | | |
| TWO DIRECTIONAL PEAK | | | | | | | | | | | | | | | |
| AM - PEAK HR TIME | | | | | | | | | | | | | | | |
| AM - PEAK HR VOLUME | | | | | | | | | | | | | | | |
| AM - K FACTOR (%) | | | | | | | | | | | | | | | |
| AM - D (%) | | | | | | | | | | | | | | | |
| NON-COMMUTER PERIOD (09:00-15:00) | | | | | | | | | | | | | | | |
| TWO DIRECTIONAL PEAK | | | | | | | | | | | | | | | |
| PEAK HR TIME | | | | | | | | | | | | | | | |
| PEAK HR VOLUME | | | | | | | | | | | | | | | |
| DIRECTIONAL PEAK | | | | | | | | | | | | | | | |
| PEAK HR TIME | | | | | | | | | | | | | | | |
| PEAK HR VOLUME | | | | | | | | | | | | | | | |
| PM COMMUTER PERIOD (15:00-19:00) | | | | | | | | | | | | | | | |
| TWO DIRECTIONAL PEAK | | | | | | | | | | | | | | | |
| PM - PEAK HR TIME | | | | | | | | | | | | | | | |
| PM - PEAK HR VOLUME | | | | | | | | | | | | | | | |
| PM - K FACTOR (%) | | | | | | | | | | | | | | | |
| PM - D (%) | | | | | | | | | | | | | | | |
| DIRECTIONAL PEAK | | | | | | | | | | | | | | | |
| PM - PEAK HR TIME | | | | | | | | | | | | | | | |
| PM - PEAK HR VOLUME | | | | | | | | | | | | | | | |
| PM PERIOD (12:00-24:00) | | | | | | | | | | | | | | | |
| TWO DIRECTIONAL PEAK | | | | | | | | | | | | | | | |
| PM - PEAK HR TIME | | | | | | | | | | | | | | | |
| PM - PEAK HR VOLUME | | | | | | | | | | | | | | | |
| PM - K FACTOR (%) | | | | | | | | | | | | | | | |
| PM - D (%) | | | | | | | | | | | | | | | |
| 6-HR, 12-HR, 24-HR PERIODS | | | | | | | | | | | | | | | |
| AM 6-HR PERIOD (06:00-12:00) | | | | | | | | | | | | | | | |
| AM 12-HR PERIOD (00:00-12:00) | | | | | | | | | | | | | | | |
| PM 6-HR PERIOD (12:00-18:00) | | | | | | | | | | | | | | | |
| PM 12-HR PERIOD (12:00-24:00) | | | | | | | | | | | | | | | |
| 24 HOUR PERIOD | | | | | | | | | | | | | | | |
| D (%) | | | | | | | | | | | | | | | |

Run Date: 2012/05/14

Hawaii Department of Transportation
Highways Division
2011 Program Count - Summary

Town: Maui
Count Type: CLASS
DIR 1: +MP
DIR 2: -MP
Final AADT: 34400
Route No: 31
Counter Type: Tube

Site ID: B74003100000
Functional Class: URBAN:PRINCIPAL ARTERIAL - OTHER
Location: PII LANI Hwy - MOKULELE Hwy TO LIPOA STRE



| TIME-AM | DIR 1 | DIR 2 | TOTAL | TIME-AM | DIR 1 | DIR 2 | TOTAL | TIME-PM | DIR 1 | DIR 2 | TOTAL | TIME-PM | DIR 1 | DIR 2 | TOTAL |
|-----------------------------------|-------|-------|-------|-------------|-------|-------|-------|-------------|-------|-------|-------|-------------|-------|-------|-------|
| DATE : 09/28/2011 | | | | | | | | | | | | | | | |
| 12:00-12:15 | 28 | 36 | 63 | 08:00-08:15 | 104 | 107 | 211 | 12:00-12:15 | 232 | 280 | 522 | 08:00-08:15 | 260 | 228 | 478 |
| 12:15-12:30 | 18 | 42 | 60 | 08:15-08:30 | 161 | 186 | 328 | 12:15-12:30 | 245 | 278 | 523 | 08:15-08:30 | 263 | 204 | 467 |
| 12:30-12:45 | 11 | 15 | 26 | 08:30-08:45 | 234 | 198 | 432 | 12:30-12:45 | 266 | 281 | 547 | 08:30-08:45 | 219 | 211 | 430 |
| 12:45-01:00 | 11 | 24 | 36 | 08:45-07:00 | 282 | 184 | 466 | 12:45-01:00 | 273 | 290 | 563 | 08:45-07:00 | 207 | 260 | 467 |
| 01:00-01:15 | 13 | 13 | 26 | 07:00-07:15 | 257 | 262 | 549 | 01:00-01:15 | 246 | 278 | 521 | 07:00-07:15 | 194 | 201 | 395 |
| 01:15-01:30 | 13 | 12 | 25 | 07:15-07:30 | 417 | 308 | 725 | 01:15-01:30 | 292 | 288 | 580 | 07:15-07:30 | 175 | 170 | 345 |
| 01:30-01:45 | 12 | 12 | 24 | 07:30-07:45 | 446 | 308 | 752 | 01:30-01:45 | 290 | 321 | 611 | 07:30-07:45 | 151 | 137 | 288 |
| 01:45-02:00 | 11 | 18 | 29 | 07:45-08:00 | 321 | 272 | 593 | 01:45-02:00 | 334 | 265 | 599 | 07:45-08:00 | 154 | 134 | 288 |
| 02:00-02:15 | 5 | 14 | 19 | 08:00-08:15 | 284 | 279 | 563 | 02:00-02:15 | 330 | 280 | 610 | 08:00-08:15 | 148 | 142 | 290 |
| 02:15-02:30 | 10 | 21 | 31 | 08:15-08:30 | 308 | 267 | 575 | 02:15-02:30 | 316 | 330 | 646 | 08:15-08:30 | 143 | 159 | 302 |
| 02:30-02:45 | 14 | 12 | 26 | 08:30-08:45 | 244 | 256 | 500 | 02:30-02:45 | 332 | 279 | 611 | 08:30-08:45 | 132 | 131 | 263 |
| 02:45-03:00 | 11 | 11 | 22 | 08:45-08:00 | 248 | 235 | 483 | 02:45-03:00 | 316 | 267 | 582 | 08:45-08:00 | 127 | 96 | 223 |
| 03:00-03:15 | 10 | 13 | 23 | 09:00-08:15 | 238 | 236 | 474 | 03:00-03:15 | 347 | 284 | 631 | 09:00-08:15 | 142 | 99 | 241 |
| 03:15-03:30 | 20 | 16 | 36 | 08:15-08:30 | 234 | 237 | 471 | 03:15-03:30 | 338 | 364 | 700 | 08:15-08:30 | 119 | 99 | 218 |
| 03:30-03:45 | 32 | 15 | 47 | 08:30-08:45 | 240 | 276 | 516 | 03:30-03:45 | 328 | 327 | 653 | 08:30-08:45 | 122 | 125 | 247 |
| 03:45-04:00 | 31 | 25 | 56 | 09:45-10:00 | 221 | 224 | 445 | 03:45-04:00 | 382 | 333 | 715 | 09:45-10:00 | 116 | 95 | 211 |
| 04:00-04:15 | 32 | 17 | 49 | 10:00-10:15 | 207 | 248 | 455 | 04:00-04:15 | 315 | 349 | 664 | 10:00-10:15 | 97 | 85 | 182 |
| 04:15-04:30 | 37 | 19 | 56 | 10:15-10:30 | 208 | 248 | 457 | 04:15-04:30 | 355 | 419 | 774 | 10:15-10:30 | 80 | 91 | 171 |
| 04:30-04:45 | 49 | 28 | 77 | 10:30-10:45 | 228 | 238 | 467 | 04:30-04:45 | 350 | 340 | 690 | 10:30-10:45 | 76 | 55 | 131 |
| 04:45-05:00 | 45 | 12 | 57 | 10:45-11:00 | 213 | 264 | 477 | 04:45-05:00 | 343 | 287 | 630 | 10:45-11:00 | 74 | 73 | 147 |
| 05:00-05:15 | 62 | 40 | 102 | 11:00-11:15 | 220 | 228 | 448 | 05:00-05:15 | 375 | 303 | 678 | 11:00-11:15 | 51 | 71 | 122 |
| 05:15-05:30 | 69 | 49 | 118 | 11:15-11:30 | 238 | 278 | 517 | 05:15-05:30 | 343 | 288 | 631 | 11:15-11:30 | 42 | 67 | 109 |
| 05:30-05:45 | 88 | 69 | 157 | 11:30-11:45 | 228 | 275 | 501 | 05:30-05:45 | 312 | 277 | 589 | 11:30-11:45 | 30 | 46 | 76 |
| 05:45-06:00 | 104 | 72 | 176 | 11:45-12:00 | 233 | 234 | 467 | 05:45-06:00 | 290 | 243 | 533 | 11:45-12:00 | 28 | 32 | 60 |
| AM COMMUTER PERIOD (05:00-08:00) | | | | | | | | | | | | | | | |
| TWO DIRECTIONAL PEAK | | | | | | | | | | | | | | | |
| AM - PEAK HR TIME | | | | | | | | | | | | | | | |
| AM - PEAK HR VOLUME | | | | | | | | | | | | | | | |
| AM - K FACTOR (%) | | | | | | | | | | | | | | | |
| AM - D (%) | | | | | | | | | | | | | | | |
| DIRECTIONAL PEAK | | | | | | | | | | | | | | | |
| AM - PEAK HR TIME | | | | | | | | | | | | | | | |
| AM - PEAK HR VOLUME | | | | | | | | | | | | | | | |
| AM - D (%) | | | | | | | | | | | | | | | |
| AM PERIOD (07:00-12:00) | | | | | | | | | | | | | | | |
| TWO DIRECTIONAL PEAK | | | | | | | | | | | | | | | |
| AM - PEAK HR TIME | | | | | | | | | | | | | | | |
| AM - PEAK HR VOLUME | | | | | | | | | | | | | | | |
| AM - K FACTOR (%) | | | | | | | | | | | | | | | |
| AM - D (%) | | | | | | | | | | | | | | | |
| NON-COMMUTER PERIOD (08:00-15:00) | | | | | | | | | | | | | | | |
| TWO DIRECTIONAL PEAK | | | | | | | | | | | | | | | |
| PEAK HR TIME | | | | | | | | | | | | | | | |
| PEAK HR VOLUME | | | | | | | | | | | | | | | |
| DIRECTIONAL PEAK | | | | | | | | | | | | | | | |
| PEAK HR TIME | | | | | | | | | | | | | | | |
| PEAK HR VOLUME | | | | | | | | | | | | | | | |
| AM COMMUTER PERIOD (15:00-19:00) | | | | | | | | | | | | | | | |
| TWO DIRECTIONAL PEAK | | | | | | | | | | | | | | | |
| PM - PEAK HR TIME | | | | | | | | | | | | | | | |
| PM - PEAK HR VOLUME | | | | | | | | | | | | | | | |
| PM - K FACTOR (%) | | | | | | | | | | | | | | | |
| PM - D (%) | | | | | | | | | | | | | | | |
| DIRECTIONAL PEAK | | | | | | | | | | | | | | | |
| PM - PEAK HR TIME | | | | | | | | | | | | | | | |
| PM - PEAK HR VOLUME | | | | | | | | | | | | | | | |
| PM - D (%) | | | | | | | | | | | | | | | |
| PM PERIOD (12:00-24:00) | | | | | | | | | | | | | | | |
| TWO DIRECTIONAL PEAK | | | | | | | | | | | | | | | |
| PM - PEAK HR TIME | | | | | | | | | | | | | | | |
| PM - PEAK HR VOLUME | | | | | | | | | | | | | | | |
| PM - K FACTOR (%) | | | | | | | | | | | | | | | |
| PM - D (%) | | | | | | | | | | | | | | | |
| 6-HR, 12-HR, 24-HR PERIODS | | | | | | | | | | | | | | | |
| AM 6-HR PERIOD (06:00-12:00) | | | | | | | | | | | | | | | |
| AM 12-HR PERIOD (00:00-12:00) | | | | | | | | | | | | | | | |
| PM 6-HR PERIOD (12:00-18:00) | | | | | | | | | | | | | | | |
| PM 12-HR PERIOD (12:00-24:00) | | | | | | | | | | | | | | | |
| 24 HOUR PERIOD | | | | | | | | | | | | | | | |
| D (%) | | | | | | | | | | | | | | | |

Attachment H
1 of 1

- Local News
- Opinion
- Blogs
- Sports
- Maui Scene
- Ads
- Vac Rentals
- Jobs
- Classifieds
- Extras
- TV
- CU

Local News

/ News / Local News /

Kahului Weather Forec

< Students participate in two-...

County / In Brief>

- Local News
- Business
- On the Campaign Trail
- Entertainment
- Neighbors
- Community
- Obituaries -- see also Online Newspaper Ads/In Memoriam
- Religion
- Opinion
- Hawaii News
- National News
- International News
- Weather
- SUBMIT NEWS: Virtual Newsroom

Honolulu buses coming to Maui

Retired vehicles donated to serve growing system

April 1, 2012
The Maui News

Save |

HONOLULU - Honolulu is shipping three retired, 18-year-old public buses to Maui to help with the Valley Isle's fast-growing public transportation system.

Each of the buses can carry up to 45 seated passengers and another 20 standing. The buses are fully operational, but they are at the end of their planned service life for Honolulu's TheBus fleet, according to an announcement. The city is replacing the buses with new ones as part of its fleet management plan.

Mayor Alan Arakawa said that the buses are needed on Maui.

"The Maui Bus system is one of the fastest-growing public transit systems in the nation," he said. "We have more passengers waiting at our bus stops every day and no room on our buses. This transfer from the City and County of Honolulu is helping us address that problem."

Maui has seen a recent spike in bus use from growing demand from cruise ship passengers in West Maui, according to the announcement.

Honolulu Mayor Peter Carlisle said that the bus transfer was a "win-win deal" for both counties.

If the buses weren't transferred to Maui, they would have been sold at an auction.

But County Department of Transportation Director Jo Anne Winer said it would have been difficult for Honolulu to sell the buses at auction with a limited market on Oahu. If the buses were not sold, the city would have needed to pay to scrap them, she said.

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Article Photos



Maui County Mayor Alan Arakawa and Honolulu Mayor Peter Carlisle

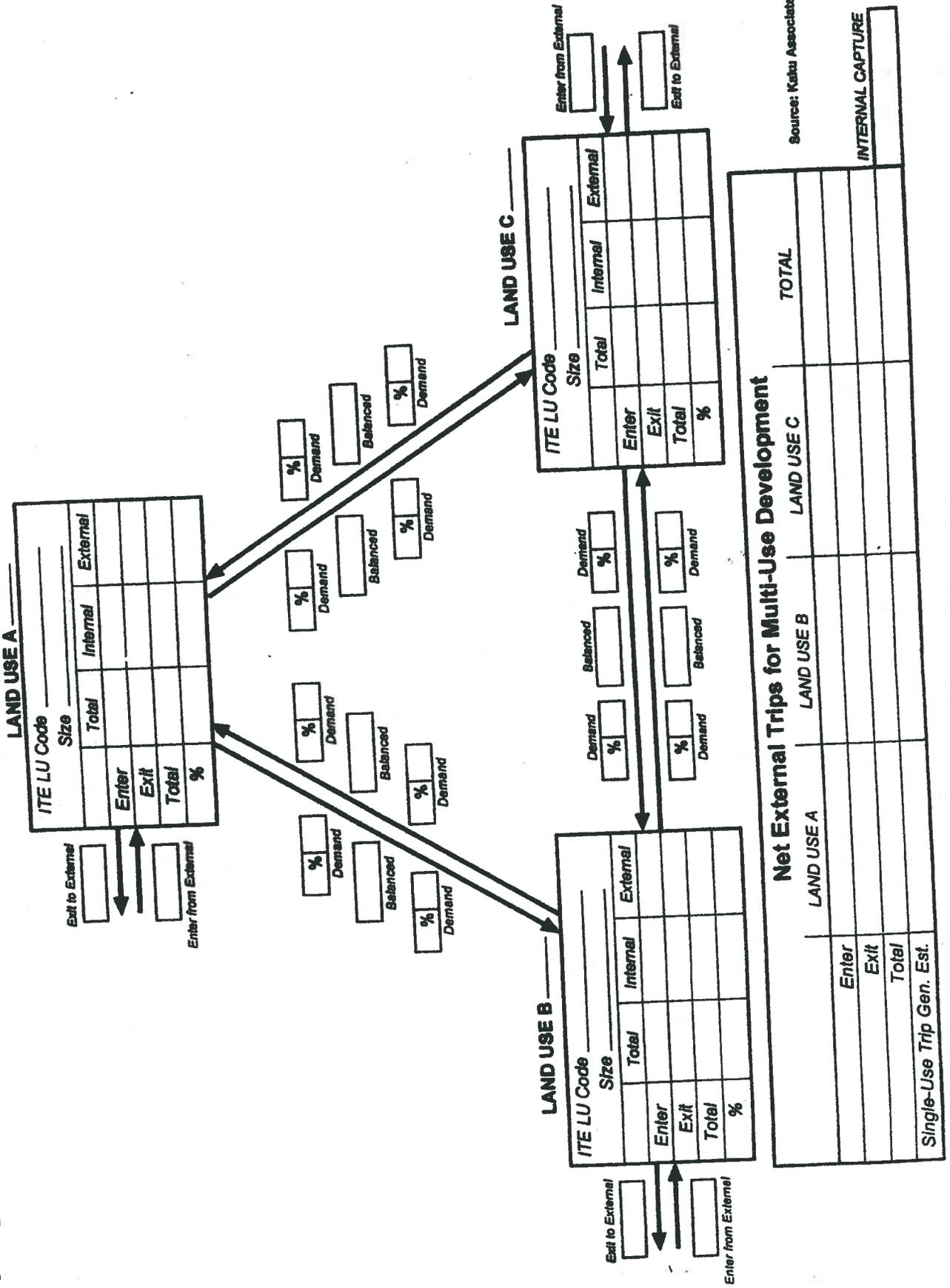
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**MULTI-USE DEVELOPMENT
 TRIP-GENERATION
 AND INTERNAL CAPTURE SUMMARY**

Analyst _____
 Date _____



**Trip Generation for MRTP
(Without trip reductions)**

| | ADT | AM Hour | AM In | AM Out | PM Hour | PM In | PM Out |
|---|---------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Phase 1 (Year 2024) | | | | | | | |
| Single Family Homes 210 | 4,307 | 338 | 84 | 253 | 455 | 286 | 168 |
| Mid-Rise Apartment 223 | 1200* | 45 | 14 | 31 | 59 | 34 | 25 |
| Resd. Condo/Townhouse 230 | 872 | 66 | 11 | 55 | 78 | 52 | 26 |
| Hotel 310 | 1,226 | 84 | 51 | 33 | 89 | 47 | 42 |
| Elementary School 520 | 1,574 | 530 | 297 | 233 | 123 | 56 | 68 |
| R & D Center 760 | 5,865 | 882 | 732 | 150 | 774 | 116 | 658 |
| Specialty Retail Center 814 | 4,432 | 684 | 328 | 356 | 271 | 119 | 152 |
| Total = | 19,475 | 2,629 | 1,518 | 1,111 | 1,848 | 710 | 1,138 |
| Phase 2 (Year 2034) - 2 lane mauka | | | | | | | |
| Single Family Homes 210 | 7,178 | 563 | 141 | 422 | 758 | 477 | 280 |
| Mid-Rise Apartment 223 | 2000* | 110 | 19 | 91 | 130 | 87 | 43 |
| Resd. Condo/Townhouse 230 | 1,453 | 110 | 19 | 91 | 130 | 87 | 43 |
| Hotel 310 | 1,226 | 84 | 51 | 33 | 89 | 47 | 42 |
| Elementary School 520 | 1,574 | 530 | 297 | 233 | 123 | 56 | 68 |
| R & D Center 760 | 9066 | 1364 | 1132 | 232 | 1196 | 179 | 1016 |
| Specialty Retail Center 814 | 4,432 | 684 | 328 | 356 | 271 | 119 | 152 |
| Total = | 26,928 | 3,445 | 1,988 | 1,458 | 2,697 | 1,052 | 1,643 |

Phase 2 (Year 2034) - 4 lane mauka

| | | | | | | | |
|-----------------------------|---------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Single Family Homes 210 | 7,178 | 563 | 141 | 422 | 758 | 477 | 280 |
| Mid-Rise Apartment 223 | 2000* | 110 | 19 | 91 | 130 | 87 | 43 |
| Resd. Condo/Townhouse 230 | 1,453 | 110 | 19 | 91 | 130 | 87 | 43 |
| Hotel 310 | 1,226 | 84 | 51 | 33 | 89 | 47 | 42 |
| Elementary School 520 | 1,574 | 530 | 297 | 233 | 123 | 56 | 68 |
| R & D Center 760 | 14095 | 2120 | 1760 | 360 | 1,860 | 279 | 1581 |
| Specialty Retail Center 814 | 4,432 | 684 | 328 | 356 | 271 | 119 | 152 |
| Total = | 31,957 | 4,201 | 2,616 | 1,586 | 3,361 | 1,152 | 2,208 |

* 8 daily trips/du used from the San Diego Association of Government's (Not So) Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region since ITE Trip Generation Manual since ITE does not provide a daily rate for Land Use Code 223

Subject: FW: Maui Research & Technology Park-Traffic Analysis
From: Steve Perkins <stevep@pacificrimland.com>
Date: 7/9/2012 2:19 PM
To: Victoria [REDACTED]
CC: Michael Summers <MSummers@chpmaui.com>, "Li, Honglong" <LiH@pbworld.com>

Aloha Ms. Huffman,

We checked with our traffic engineer on your question related to the ITE codes used.

The 750 ITE code in the tables for neighborhood serving retail was a typographical error. The ITE code used in the analysis was ITE code 814-specialty retail center. The land use is up to 100,000 square feet of neighborhood serving retail, directed at employees and residents of the R&T Park. We will change the typographical error in our EIS documents going forward.

Thank you,

Steve

From: Matsunaga, Phillip [mailto:Matsunaga@pbworld.com]
Sent: Monday, July 09, 2012 11:04 AM
To: Steve Perkins
Subject: RE: Maui Research & Technology Park-Traffic Analysis

I checked the trip generation analysis and the land use was mislabeled in the trip generation table (Table 7, page 39). The ITE code shown should be 814 (Specialty Retail Center), not 750.

Phillip Matsunaga
Parsons Brinckerhoff
American Savings Bank Tower
1001 Bishop Street, Suite 2400
Honolulu, Hawaii 96813
808-531-7094 (office)
808-566-2256 (direct)

From: Steve Perkins [mailto:stevep@pacificrimland.com]
Sent: Monday, July 09, 2012 7:44 AM
To: Victoria
Cc: Michael Summers; Li, Honglong
Subject: RE: Maui Research & Technology Park-Traffic Analysis

Good morning Ms Huffman,

We will review and get back to you with the information requested below.

Thank you,

Steve

Attachment K

From: Victoria [REDACTED]
Sent: Sunday, July 08, 2012 3:55 PM
To: Steve Perkins
Cc: Michael Summers; Li, Honglong
Subject: Re: Maui Research & Technology Park-Traffic Analysis

2 of 2

Mr. Perkins,

Page 22, Table 3 of the TIAR and Page 39, Table 7 of the TIAR show 100,000 sf of retail as ITE Code 750. However, ITE Land Use Code 750 is office park. What ITE Code was used to calculate the trips for the 100,000 sf, and what land use is proposed for this 100,000 sf?

Thank you,
Victoria A. Huffman, P.E.

On 7/3/2012 4:17 PM, Steve Perkins wrote:
Hello Ms. Huffman,

Parsons Brinkerhoff—our traffic consultants on the Maui research & Technology Park Master Plan Update —forwarded me your contact information.

All of the correspondence/inquires for the project are being channeled through me or our planners at Chris Hart & Partner's office.

Please let me know if you have questions or comments. We can correspond by e-mail if you like, or set up a time to meet in person or on a conference call.

All the best,

Steve

Steve Perkins

Project Coordinator
Pacific Rim Land, Inc.
P.O. Box 220
1300 North Holopono, Suite 201
Kihei, Hawaii 96753

Office: 808-270-5944
Cell: 808-281-3559
Fax: 808-879-2557
Email: stevep@pacifricrimland.com



**CHRIS
HART**
& PARTNERS, INC.

Landscape Architecture
City & Regional Planning

March 1, 2013

Ms. Victoria A. Huffman, P.E.
163 Kuli Pu'i Street
Kihei, HI 96753-7164

Dear Ms. Huffman,

RE: Comments on the Draft Environmental Impact Statement (EIS) for the Proposed Maui Research and Technology Park Master Plan update, located in Kihei, Maui, Hawaii at TMK's: (2) 2-2-024:1-9,14-18,31,32, 34, 36-46 and (2) 2-2-002:054 (por.)

Thank you for your letter received on August 5, 2012. In response to comments a revised TIAR was prepared in February 2013 and the updated analysis can be found in the Final EIS in Section III.D.1 Roadways and Appendix G. In addition I am please to provide the following responses to your numerated comments:

Specific Comments to the DEIS

1. *The Project Description in the DEIS must be revised to state the maximum traffic that each phase of the Project would generate (average daily trips, a.m. peak-hour inbound trips, a.m. peak-hour outbound trips, p.m. peak-hour inbound trips, p.m. peak-hour outbound trips). The maximum trip generation for each phase of the Project will need to be a condition in the forthcoming discretionary permit(s) issued for MRTP, and the trip generation of the site will need to be monitored by the County of Maui as the site develops to ensure compliance with this permit condition. Otherwise, if the Project were to develop and generate more traffic then evaluated in the TIAR, then the DEIS may not disclose all the project's impacts.*

Response: The Applicant will comply with the Hawaii State and the Maui County standard to make necessary revisions to the TIAR.

2. *Page 15, Roadways: The DEIS recommends "certain improvements be constructed with Phase I of the Project" and that one of these improvements is "Traffic signal timing adjustments at the Liloa Drive / Lipoa Street intersection to improve operation." How is traffic signal timing an improvement that would be constructed? What specifically regarding the traffic signal timing should be adjusted at this location?*

Response: Adjusting the signal timing is recommended to accommodate the projected traffic pattern change at this intersection. The traffic signal at the intersection of Liloa Drive/Lipoa Street will operate better with increased maximum green time for north-south through movements.

3. *Page 15, Roadways: The DEIS recommends as a Phase I improvement, "If feasible, construct a second access onto Piilani Highway from MRTP at the permitted access point near East Waipuilani Road." This improvement was assumed in the Year 2024 with Project analysis in the TIAR. If there is a chance that this improvement is not feasible, then the TIAR should provide an alternate analysis without this improvement in place; otherwise, the Project's effects on other access points along Piilani Highway may be underestimated.*

Response: The Applicant is working with Hawaii State Department of Transportation (HDOT) on East Waipuilani Road access. In HDOT's letter dated September 20, 2012, HDOT expressed no objection to this access. (See: Attachment 1)

4. *Page 16, Roadways: Please clarify what is meant by the phrase in the first sentence on this page, "...the creation of additional westbound westbound routes into the MRTP..."*

Response: This sentence contains a typographical error that has been corrected in the Final EIS.

5. *Page 16, Roadways: The DEIS recommends as a Phase 2 improvement, "If feasible and deemed to be of significant benefit at the time Phase 2 is undertaken, construct a third access onto Piilani Highway at the permitted access point near the old Welakahao Road intersection." The TIAR should provide an analysis both with and without the intersection of Old Welakahao Road/Piilani Highway as an access point. Otherwise, the Project may have impacts not disclosed in the DEIS.*

Response: The applicant is working with Hawaii State Department of Transportation (HDOT) on Old East Welakahao Road access. The Revised TIAR provides an analysis both with and without the intersection of Old Welakahao Road/Piilani Highway as an access point.

6. *Page 74 of the DEIS states, "The implementation of the Master Plan Update will be over the course of years and as market conditions warrant" and that development will continue as current County ordinances prescribe and as demand arises. If this is the case, then this project cannot be assumed to be a Smart Growth project over the course of the project's development. For example, if market conditions for housing were strong and Research & Development demand were low, then it is anticipated, based on this statement in the DEIS, that the project would develop initially with only housing. If this were to happen, then this phase of the project could not be considered Smart Growth. Therefore, this project should not be allowed to develop as market conditions warrant. Instead, the project should be required to develop with a mix of uses that would ensure it adheres to the principles of Smart Growth.*

Response: Any large development project, particularly one like the MRTP where many years will elapse before the completion of the project, is subject to the effects of the market. In the U.S. and other market economies, what is built and occupied is a product of the decisions of developers, tenants and buyers. The larger the project and the more varied the uses, the less coordinated the land use may be during the various stages of the project. This was the case with many existing neighborhoods which now have a balance of land uses – they developed over time and did not always contain what might have been desired for their land use mixes at any given moment. This is a part of the natural process of growth and change in urban areas.

The function of the Master Plan Update and this project is not to replace the market economy. The Plan is creating a framework which will allow and hopefully guide the type of development to occur which will come together as a balanced, healthy neighborhood with a mix of uses. As in any city district, however, market conditions will determine the order of what gets built. Strict regulation of the order and balance of development would serve not to create the desired balance but rather to retard the development of the Park and the achievement of the desired economic development benefits. Forcing jobs to wait for housing to develop which the market would not at that moment support, for instance, may force the Park to forgo job creation. The plan seeks to add more flexibility to the development process by adding allowed land uses and reducing regulation where unneeded. Requiring an artificial balance of uses at every stage of development would have the opposite effect.

7. *Page 141 and Page 147 of the DEIS (and Page 17 of the TIAR): The DEIS and the TIAR should be revised to account for the fact that the roundabout at the intersection of Piikea Avenue/Liloa Drive is completed and is fully operational.*

Response: At the time the TIAR was being prepared, the roundabout had not yet been constructed and the intersection was still all-way stop-controlled. The Applicant has recounted the intersection as a roundabout and the roundabout analysis in the TIAR and discussion in the Final EIS have been updated.

8. *Page 146 of the DEIS (and Page 15 of the TIAR) states, "...it is assumed that the north-south collector roadway (an extension of the existing Liloa Drive) would be in place by 2024 due to its presence in the six-year Capital Program." Although the north-south collector roadway is listed in the six-year Capital Program, that does not guarantee there will be sufficient funding for the project to be constructed. An alternative analysis that assumes the north-south collector is not constructed should be provided.*

Response: Liloa Drive from Waipuilani Road to Lokelani School is already built. According to the Maui County 2013 Capital Improvement Program budget approved by the Maui County Council, the North South Collector Road (makai collector) is budgeted from fiscal year 2015 to 2018 at a cost of \$18.2 million with two phases. (See: Attachment 2) Phase 1 will be the segment from Kaonoulu Street to Waipuilani Road and Phase 2 will be the segment from Lokelani School to Kanani Road. The County DPW, HDOT Maui, and the applicant held a meeting on this subject on October 16, 2012. (See:

Attachment 3) At that meeting, the Director of Public Works said that the Mayor and his administration support construction of the roadway. We believe the Liloa Drive Extension is committed by the County and will be placed in the future Statewide Transportation Improvement Program (STIP); therefore this improvement is included in all analyses in the Revised TIAR.

9. *Page 146 of the DEIS (and Page 15 of the TIAR) indicates the following other project's traffic were included in the Year 2024 volumes:*
- *Kihei High School*
 - *Piilani Promenade*
 - *Maui Lu Resort*
 - *Kenolio 6*
 - *Kiwahine Village*
 - *A&B N. Kihei Residential*
 - *Honua'ula*
 - *Wailea Resort*
 - *Makena Resort*

A brief description of each of these development projects should be provided in the TIAR. What is the trip generation of each of these projects and what is the trip assignment of each of these projects on the local roadway network? Where are these development projects located relative to the MRTP site? Figures containing this information should be provided in the TIAR.

Response: Each of these projects has published its own Environmental Assessment or Environmental Impact Statement along with Traffic Impact Analysis Report. For information on trip generation and assignment for these projects, please refer to their respective traffic studies. The focus of our TIAR is to identify Maui R&T Park project's impacts and mitigations.

10. *Page 151 of the DEIS (and Page 17 of the TIAR) states, "Based on the assumed background growth projections, the following improvements are recommended to be implemented by year 2024 to address the without project conditions:*
- *Complete Liloa Drive continuously between Kaonoulu Street and Kanani Road as a two-lane roadway; and*
 - *At the intersection of Piilani Highway/East Welakahao Road, observe queuing at East Welakahao approach left turn to determine the extent to which the northbound Piilani Highway refuge lane is utilized."*

How is observing queuing a recommended improvement? What improvement is suggested at Pi'ilani Highway/East Welakahao Road?

Response: Monitoring the queuing at the Piilani Highway/East Welakahao Road intersection is recommended. While the existing refuge lane on Piilani Highway provides storage for mauka-bound left turns to merge into Piilani Highway, the intersection should be monitored to see if the refuge lane will be effective in reducing mauka-bound left turn delay in the future. With the completion of Liloa Drive Extension

as an alternative to Piilani Highway, mauka-bound left turns at this intersection may decrease.

11. *Based on the information in the TIAR, Phase 1 of the Project would have a significant impact at Pi'ilani Highway/East Welakahao Road by substantially increasing the delay experienced by the eastbound left turn at this intersection. This location needs to be signalized to mitigate the Project's impact. The Project should either install this traffic signal or wait to construct phase 1 of the Project until a traffic signal is installed by others at this location.*

Additionally, Phase 1 of the Project should not move forward until the North-South Collector Street is constructed from Ka 'ono' ulu Street and Kanani Road as a two lane roadway. Otherwise, the Project would have impacts that are not disclosed in the DEIS.

Response: The Level of Service (LOS) at the intersection of Piilani Highway and East Welakahao Road is F with or without the project. Further study may be needed for HDOT to determine if a signal will be warranted. Please also see our response to Comment # 10.

Regarding the construction of the North-South Collector Road, please see response to Comment #8.

12. *Page 154, Table 8; and, Page 166 – 167, table 12 and 13 of the DEIS: As discussed elsewhere in this comment letter, the trip generation estimated for the Project is too low due to an unreasonably high internal trip capture and modal split assumed.*

Response: The calculations and the analyses in the TIAR were conducted according to HDOT standards. The Applicant will work with HDOT to estimate the external trips based on the assumed low, medium, and high internal capture rates. This would provide HDOT a useful tool to gauge the traffic impact by different levels of internal capture. Internal capture for local school and community shopping center are not clearly defined by the ITE Trip Generation Manual. The planned elementary school will be built largely for the Maui R&T Park development. It is not anticipated that the school will generate a significant amount of external trips. Similarly the community shopping center as currently planned is not visible from Piilani Highway and will mostly serve the Maui R&T Park development. With Kihei Elementary School nearby and other more convenient shopping centers located makai of Piilani Highway, the Applicant will assume higher than 15% internal capture rates for the planned school and community shopping center.

In addition, the development will utilize the principles of new urbanism and smart growth providing diverse housing options within close proximity of the park's employment and integrating neighborhood serving retail, civic and commercial uses in a manner that encourages bicycling and walking. The residential component of the development will be targeted at the employees of the MRTP which will reduce the need for workers to drive to and from work. For conservative purposes, we agree that 15% internal capture applies to residential and office land uses.

13. *Page 154, Table 9; and page 168, Table 14 of the DEIS; and, page 25, Table 4 and page 41, Table 9 of the TIAR: The percentages shown in these tables are too low because the DEIS and its TIAR underestimates the Project's trip generation.*

Response: Please see response to Comment #12.

14. *Page 159 of the DEIS and (Page 31 of the TIAR) states, "Based on the operational analyses of intersections, the following are recommended to be implemented with Phase 1 to mitigate the project's impact:*
1. *Construct an additional southbound Piilani Highway left turn lane (two total);*
 - a. *Widen westbound Lipoa Parkway to provide for left, through, and right turn lanes;*
 - b. *Widen and/or restripe eastbound Lipoa Street to provide left, through, and right turn lanes;*
 2. *Adjust the signal timing at the intersection of Liloa Drive and Lipoa Street to better serve the anticipated traffic pattern; and*
 3. *Connect Hookena Street, as a two-lane roadway to Piilani Highway as a right in/right out.*

Response: There are no comments or questions that need to be addressed here.

15. *What exact signal timing changes are proposed at the intersection of Liloa Drive/Lipoa Street? Also, Page 15 of the DEIS indicates the connection of Hookena Street may not be feasible. If there is any chance that it is not feasible, then an analysis should be provided without this improvement in place; otherwise the project would have impacts not disclosed in the DEIS. Finally, what measures will be taken to ensure the connection at Hookena Street will be a right in/right out access and vehicles will not turn left at this access point?*

Response: Regarding the signal timing at the Liloa/Lipoa intersection, please see response to Comment #2.

Regarding the Hookena connection, please see response to Comment #3.

16. *Page 160 of the DEIS (and Page 32 of the TIAR) states, "To address year 2034 without and with Project conditions, it is assumed that the following infrastructure improvements are in place prior to the development:*
1. *The Liloa Drive extension would be in place between Kaonoulu Street and Kanani Road.*
 2. *Kihei Upcountry Road will be in place."*

Unless MRTTP is willing to construct these improvements, any improvement assumed to be in place in the Year 2034 scenario must be fully constructed before the MRTTP is issued any building permits for Phase 2; otherwise, the Project would have traffic impacts not disclosed in the DEIS, and the DEIS would not have been prepared in accordance with Chapter 11-200, Hawaii Administrative (HAR). The DEIS should be revised to indicate Phase 2 will not move forward until these improvements are in place.

Response: Regarding the Liloa Drive extension, please see response to Comment #8.

Kihei Upcountry Highway is in the current Maui Long Range Land Transportation Plan. The Applicant will coordinate with HDOT and update its status if necessary.

17. *Page 176 of the DEIS and Page 60 of the TIAR state with respect to Phase 2 of the Project, "The project impacts the Piilani Highway/Piikea Avenues and Liloa Drive/Piikea Avenue intersections but accounts for a relatively small percentage of the total peak hour traffic." It is not material that the project accounts for a relatively small percentage of the total peak hour traffic. These are cumulative impacts that should be mitigated by the proposed project. Propose mitigation and pay a fair share towards the improvements that would mitigate these impacts.*

Response: The Applicant will coordinate with HDOT and other stakeholders in the region and is willing to contribute its fair share to the cost of regional improvements to State highways and/or traffic mitigation measures.

18. *Page 165 and Page 177 of the DEIS and Page 37-38 of the TIAR state, "Determine whether the addition of an additional left turn lane for the EB Piikea approach and/or the northbound Piilani approach is appropriate to address the capacity issues at the intersection of Piilani Highway/Piikea Avenue. How is "determine" a mitigation or improvement? Also, should the "and/or" in this sentence be an "and" or an "or?" The DEIS and its TIAR should state precisely what improvements are required.*

Response: At this intersection, the construction of the left turn is provisionally shouldered by the County Department of Public Works as stated in a Memorandum of Understanding (MOU) for South Maui Community Park Project. (See: Attachment 4)

19. *Page 165 and Page 177 of the DEIS and Page 37-38 of the TIAR state, "Examine potential methods to increase capacity of the roundabout as the intersection of Liloa Drive/Pi'ikea Avenue." How is "examine potential methods" an improvement? What improvements should be made to increase the capacity of the roundabout so it operates at acceptable LOS? It is the responsibility of the TIAR to determine this based on the forecast volumes at this roundabout.*

Response: Please see response to Comment #7.

20. *Page 165 and page 177 of the DEIS; and, Page 37-38 of the TIAR, state the following are recommended to be implemented by the year 2034, subject to verification that the improvements are warranted, with updated traffic engineering studies at the time of implementation:*
1. *Construct the mauka collector as a two-lane roadway between Mokulele Highway and a point somewhere south of MRTTP on Piilani Highway.*
 2. *Determine whether the addition of an additional left turn lane for the EB Piikea approach and/or the northbound Piilani approach is appropriate to address the capacity issues at the intersection of Piilani Highway/Piikea Avenue.*
 3. *Examine potential methods to increase capacity of the roundabout at the intersection of Liloa Drive/Piikea Avenue.*

Who will pay for these "improvements?" If the MRTP is not willing to pay for and construct them, then it must wait to pull building permits for Phase 2 until these improvements are constructed; otherwise, the Project will have significant traffic impacts not disclosed in the TIAR. Alternatively, the TIAR should provide an analysis without these improvements in place and disclose the Project's impacts in the event these improvement are not constructed.

Response: Regarding the mauka collector, the roadway is not included in the current STIP, as it is not anticipated to be necessary for many years. However, the community and county government have carefully planned for and considered the eventual need for the road. Maui County strongly supports an interconnected Kihei mauka transportation network as shown in the attached August 13, 2012 letter. (See: Attachment 5) A North South roadway mauka of Piilani Highway, to be constructed as growth in the region warrants, is also identified as being supported in the 1998 Kihei-Makena Community Plan.

The MRTP project is located within the Maui Island Plan urban growth boundary, and is sited within an area of directed growth adjacent to existing development and required infrastructure. The Plan further identifies MRTP as an important employment center and states that infrastructure improvements, including roads, will be prioritized and allocated to directed growth areas, such as MRTP.

The Maui Island Plan also contemplates a future north south roadway in several sections. (See: Attachment 6) The Plan's directed growth chapter description of the MRTP states "the build-out of MRTP should be coordinated with the development of the neighboring Kihei Mauka planned growth area to ensure efficient intra- and inter-regional transportation connectivity for both motorized and non-motorized transportation". Similar directions are included in the project descriptions of Kihei Mauka and the North Kihei residential planned growth areas located to the north of MRTP. The Applicant has initiated discussions with other landowners about providing a continuous in-tract mauka collector roadway as directed by the Maui Island Plan.

In addition to the documents above, community testimony in support of an interconnected mauka transportation corridor has been provided to the Regional Long Range Land Transportation Plan project for Maui, and additional testimony will be provided in favor of the concept when the draft plan is circulated.

The TIAR has been revised to include an analysis scenario in which the mauka collector road is not part of the future roadway network.

Regarding the intersection of Piilani Highway and Piikea Avenue, the Applicant will coordinate with HDOT to determine the needed mitigation.

Regarding the intersection of Liloa Drive and Piikea Avenue, Please see response to Comment #7.

21. *Page 178 of the DEIS (and Page 56 of the TIAR): The DEIS states, "Based on the operational analyses of intersections, the following are recommended to be implemented with Phase 2 to mitigate the project's impact:*

1. *Construct the portion of the mauka collector within the MRTP property".*

The construction of the ENTIRE mauka collector from Mokulele Highway to a location south of the MRTP would mitigate the Project's impacts to Pi'ilani Highway. In the event this new roadway is not constructed, the Project would have significant, unmitigated impacts not disclosed in this DEIS. No portion of the Project past Phase 1 should be constructed until the construction of the entire mauka collector is assured. The DEIS should be revised to indicate this.

Response: Please see response to Comment #20.

22. *Page 178: Given this project's claims to be a Smart Growth project and the implementation TDMM are consistent with the County of Maui 2030 General Plan Countywide Policy Plan, the Project should make a strong commitment to TDM measures. Therefore, the clause, "The following Transportation Demand Management Measures (TDMM) are being considered" should be revised to, "The following Transportation Demand Management Measures (TDMM) will be implemented by the MRTP."*

Response: Implementing Transportation Demand Management (TDM) measures is an important tool for influencing travel behavior and reducing traffic. To the extent feasible, the Applicant will work with future Park developers and business owners to implement the TDM measures identified in the EIS.

23. *Page 179, Alternate Access Methods: The phrase, "The following methods of consolidating trips should be considered" should be revised to state, "The following methods of consolidating trips shall be implemented by MRTP."*

Response: To the extent feasible, the Applicant will encourage and work with future Park business owners to implement methods to consolidate trips.

24. *Page 180, North-South Greenway: The text indicates an 8 foot wide "walkway" would be provided for bicycle and pedestrian travel, but Cross Section B on Page 185 shows a bicyclist riding in the street, sharing a lane with an automobile. This inconsistency should be resolved. Also, please clarify what is meant by "walkway." Is a walkway a concrete sidewalk? Asphalt sidewalk? Decomposed granite?*

Response: The North-South Greenway (Ninau Street) has been reconfigured to include a dedicated bicycle facility. (See: Attachment 7). Detailed design decisions such as material choices will be made at the time of detailed design. Such decisions will be guided by factors of safety, cost, maintenance, and functionality.

25. *Page 180, North-South Greenway: Separate on-street bicycle lanes should be provided on North-South Greenway with reverse angle parking considered to eliminate parked vehicles' doors from opening onto bicyclists.*

Response: See response to comment number 24.

26. *Page 182, Bicycle and Pedestrian Improvements: The DEIS states, "...a substantial number of infrastructure improvements are proposed to make MRTTP pedestrian and bicycle-friendly." Few bicycle infrastructure improvements are proposed that would make the Project bicycle-friendly. Requiring bicyclists to share such narrow lanes with automobiles and bicyclist having to worry about parked vehicles opening doors on them is not bicycle-friendly. Additionally, the Project is not proposing any amenities, such as bicycle lockers, showers, etc., that would create a bicycle friendly development.*

Response: The need for dedicated bicycle lanes on a given road is a continuing matter of debate even among the bicycle community. Roads with little automobile traffic and slow speeds have little need of separate lanes. As the level of traffic increases and as speed increases, the need for separate lanes increases as well. However, there is no clear line which has been universally agreed upon at which time bicycle lanes must be included in a street. The intent of the interconnected street network in the Park is to create an area with traffic moving at reasonable volumes and reasonable speeds. For this reason, roadways within the park are intended to accommodate bicyclists comfortably in mixed flow traffic and do not include dedicated bicycle facilities. However, the North-South Greenway (Ninau Street) has been reconfigured to include a dedicated bicycle facility. (See: Attachment 7).

As for amenities for bicyclists within employers' buildings, employers will be required to comply with applicable regulations by the County. However, an important goal of the Park is economic development. One method used to achieve that goal in the Park is to reduce the level of regulation so that small businesses can use space in the Park to begin their operations. Not every business in the Park will be a large one which can afford high-cost facilities, and many may be quite small during their start-up phases. The plan therefore does not intend to create a high level of regulation on the internal operations of businesses within the Park where such regulation can be avoided. Facilities such as showers and changing rooms can make it easier to ride a bicycle to work. However, people can ride bicycles in absence of such facilities. Thus, the plan avoids placing this regulation on businesses within the Park.

27. *Page 183: The typographical error in the first word on this page, "idewalks" should be replaced with the work "Sidewalks."*

Response: Thank you for identifying the typographical error. It has been corrected in the Final EIS.

28. *Page 183: The DEIS states, "Internal streets will be small in scale with narrow pavements to calm vehicle traffic and make it safer for bicycles to share the road with cars..." Dedicated bicycle lanes should be provided on all new collector streets within the MRTTP site, as well as on Lipoa Parkway.*

Response: See response to comment number 26.

29. *Page 183: the DEIS states an east-west pedestrian trail would be established to facilitate future linkage with the bicycle/pedestrian trail on Liloa Drive. Based on Figure 39, it appears this trail would not be located at an existing intersection on Pi'ilani Highway but instead would be north of the intersection of Pi'ilani Highway/E. Waipuilani Road. How will pedestrians and bicyclists utilizing this new trail cross Pi'ilani Highway? Would the trail go under Pi'ilani Highway? Who would pay for and construct whatever's necessary for the pedestrian/bicyclists to cross Pi'ilani Highway? These issues should be discussed in the DEIS.*

Response: A bicycle and pedestrian path is being considered in the Waipuilani gulch area near Piilani highway to provide connectivity between the MRTP, the future Kihei High School and the existing bicycle/pedestrian path on Liloa Drive. (See: Attachment 8) The applicant will work with the Department of Education, the owner of Waipuilani Gulch, and other government and community stakeholders towards resolving the issue of pedestrian connectivity.

30. *Page 184 – 187, Cross sections: It is commendable that the DEIS provides detailed cross sections of proposed streets. It is particularly commendable that pedestrian friendly features such as non-contiguous sidewalks, street trees, and wide parkways, and landscaped medians are proposed. However, the Project roadway network lacks sufficient on-street bike lanes to promote connectivity within the Project site, and given the trip generation of the MRTP, the provision of such dedicated bicycle lanes is warranted. In addition to the 6' wide bicycle lanes proposed on Lipoa Parkway, 6' wide dedicated bike lanes should also be proposed on North and South Ninau St, Ho'okena Street, North and South Holopono Street, and all "connector" streets. Including on-street bike lanes along these streets would help promote a multi-modal community; without these bike lanes this project cannot claim it is a Smart Growth project. Figure 39, Pedestrian and Bicycle Plan, should be revised accordingly.*

Response: See response to comment number 26.

31. *Page 184, Cross sections A3, Lipoa Parkway: Minimum 11' travel lanes should be proposed rather than the 10' wide lanes shown on this cross section, since 10' wide travel lanes are too narrow and the potential for the incidence of automobile side-swipe collisions would increase.*

Response: Increasing the width of roadways based on the belief that wider roadways are safer than narrow roadways due to the additional space for drivers to recover from error and due to additional sight distances has not proven to increase safety for pedestrians, bicyclists or drivers. When faced with wide, straight roadways, drivers respond by driving faster and with less care. The result is reduced safety, reduced livability, and reduced comfort for pedestrians and bicyclists.

Roadways in the Park are intended for use at low speeds, speeds safe for pedestrians, bicyclists, and other drivers, speeds which will not reduce livability. The extra foot of width proposed would not create safer roadways but would in fact reduce safety by inviting less careful driving.

32. *Page 187, Cross section E, Lipoa Street: This cross section should be revised to provide minimum 9 foot wide travel lanes, rather than 8 foot travel lanes, for a total curb-to-curb width of 32 feet. A 30 foot wide pavement width is too narrow to safely allow two-way traffic and yet accommodate automobile parking on both sides of the street.*

Response: See response to comment number 31.

33. *Page 188, Figure 38, Transit Circulation Plan: What is meant by a "key" transit stop? Does this mean other transit stops will be provided on this site? What type of amenities will be provided at transit stops (e.g., bus shelters, benches, trash cans)? Who would pay for these amenities? If these amenities are not provided, is it fair to call this a transit friendly site and one that incorporates smart growth principles?*

Response: The plan for transit in the Park will be further refined and elaborated over time. The current plan is not fully detailed in every aspect due to the presence of a great number of unknown factors. These include the level of future funding of the island's transit system, the routing decisions of that system's planners and leaders, the type of development which happens on all sides outside of the Park, and the level of connectivity of the associated roadways. However, it is important to consider the future configuration of transit connections in the Park conceptually to confirm that the road network will supply a sufficient level of connectivity to allow a reasonably efficient system. The plan's current transit network diagram is intended to confirm this fact, while not detailing every stop which may be placed along a future route.

The diagram indicates the most likely transit route, and at the same time indicates several important stop locations. These locations will not most likely be the only stops. However, bus stops in general may vary greatly in function and amenities. For example, some stops may have benches and shelters, while some may have only a sign indicating the presence of the stop and the route. Also, some stops may have established stop times and coordinated transfers, while others do not. The precise details of transit in the Park cannot be currently determined due to the reasons given above. Designating the important stops as has been done in the plan allows the plan to more fully coordinate transit and land use. The important stops have been placed in locations which are likely to provide the most supportive mix of density, mix of uses, and pedestrian and bicycle accessibility. Given these established locations, the plan's land uses have in turn been targeted to support transit by clustering activity to the degree possible near the stops.

The quarter mile distance is a valuable tool for locating transit and associated densities. However, this number is not a precise cutoff but only a guideline useful for conceptual purposes. Many factors affect this distance, including, for example, the walking environment, street connectivity, and the level of transit service provided. It is not intended that every portion of the Park will fall precisely within the quarter mile radius.

34. *Page 188-189, figures 38 and 39: Why do these figures show a "school connection" when other portions of the DEIS indicate this connection may not be feasible? If the connection between*

M RTP and the future Kihei High School may not be feasible, shouldn't Figures 38 and 39 be revised to say, "Potential School Connection?"

Response: While both the applicant and the Department of Education acknowledge the importance of direct pedestrian and bicycle access between the M RTP and the future Kihei High School, the type and timing of connection is uncertain at this time. A direct route of access for bicycles and pedestrians is being considered in the Waipuilani gulch area near Piilani highway. (See: Attachment 8) The applicant has discussed pedestrian and bicycle connectivity options with the Department of Education team assigned to the future Kihei High School and we have agreed to keep in close contact as development plans for the High School are being refined. The Applicant will work with the Department of Education, the owner of Waipuilani Gulch, and other government and community stakeholders towards resolving the issue of pedestrian connectivity.

Specific Comments to Preliminary Engineering & Drainage Report (Appendix F of the DEIS):

35. *Figure 5-6: Please clarify what the difference symbols and colors mean that are used on this figure, as a legend was not provided.*

Response: A legend has been added to the figure to provide clarification.

36. *Page 7-1: A document entitled, "Calthorpe Associates, Chris Hart & Partners, Maui Research & Technology Partners, "Maui Research and Technology Park Development Code" December 10, 2010," is cited as a reference and appears as a footnote throughout the report. What document is this?*

Response: The *Maui Research and Technology Park Development Code* is included in the Final EIS as Appendix Q.

Specific Comments to the TIAR (Appendix G of the DEIS):

37. *The TIAR should be signed and stamped by a Licensed Professional Engineer from the State of Hawai'i to ensure that an individual knowledgeable in the area of transportation engineering completed the work, or reviewed the document and agrees with the content of the document.*

Response: There is no State or Maui County requirement to sign and seal a traffic report.

38. *An HCM arterial analysis should be performed for Pi'ilani Highway in all analysis scenarios to demonstrate that Pi'ilani Highway would operate at an acceptable LOS.*

Response: Our data and analysis show the individual intersection analyses we conducted have fully demonstrated the characteristics of the traffic operation along Piilani Highway. Therefore, an arterial analysis is not warranted.

39. *An HCM arterial analysis should be performed for the "mauka collector: both as a two lane facility and a four lane facility in the Year 2034 analysis scenario to demonstrate that this roadway would operate at an acceptable LOS with the Project in place.*

Response: Please see response to Comment #20.

40. *The effects of the Project on the capacity if the Mokulele Highway should be evaluated.*

Response: The Applicant is currently working with HDOT to define the study boundary.

41. *The TAIR should analyze and determine what the minimum lengths of the left turn pockets will need to be to adequately accommodate the left turn demand at intersections along Pi'ilani Highway for each project phase. Similarly, the TIAR should analyze and determine the minimum acceleration and deceleration lanes that would be required. If these pocket turns or acceleration/deceleration lanes are not designed long enough, public health and safety may be compromised.*

Response: The Applicant will work with HDOT on designing the proper lane configurations according to HDOT's standard.

42. *The TIAR should analyze all assumed project access points along the future mauka roadway, and it should depict these intersections, their traffic volumes, their land configurations, and their type of control (e.g., signal, one-way stop) on appropriate figures in the TIAR.*

Response: Please see response to Comment #20.

43. *The project should install hardwire traffic signal interconnect between all traffic signals along its frontage on Pi'ilani Highway and any proposed signalized access points on the future Mauka Collector to ensure signals along these roadways may be coordinated without having their controller's clock's drift. This should be described in the TIAR and the DEIS.*

Response: The Applicant will work with HDOT to design the signals according to HDOT's standard.

44. *How many pedestrian calls per hour (not pedestrians per hour) were assumed in the Synchro intersection analyses? Numerous pedestrian calls per hour can degrade the LOS at an intersection significantly. The number of pedestrian calls per hour should be shown in the Synchro intersection analysis data sheets provided in the appendix of the TIAR. It would be expected that there would be many pedestrians crossing Pi'ilani Highway with the construction of this project.*

Response: The recommended signal phasing at Lipoa Parkway and Piilani Highway intersection will make pedestrian crossing Piilani Highway safer. The proposed leading left turn phasing will eliminate the conflicts between left turning vehicles and pedestrians crossing Piilani Highway.

45. *Page 4, Pi'ilani Highway: According to HDOT count data (Attachment G), the Pi'ilani Highway is a primarily arterial, not a major arterial as indicated in the TIAR.*

Response: The Piilani Highway is classified as Principal Arterial in the vicinity of the project according to HDOT State Route System published in 2006. The text has been revised to reflect this.

46. *Page 7, Existing Traffic Volumes: The TIAR indicates existing counts were taken on November 8, 2010. Since November is low tourist season, using these counts in the analysis may be providing an inaccurate baseline and may result in non-disclosure of all the project's significant impacts.*

Response: The tourist peak hours does not usually coincide with the commuting peak hours which are of primary concern. It is generally accepted practice to collect traffic data during commuting peak hours on Tuesdays, Wednesdays, and Thursdays when schools are in session.

47. *Page 15, The TIAR says it assumes the North-South Collector roadway would be in place by 2024 due to its presence in the six year Capital Program. According to the Maui County Capital Program, Phase 2 of the North-South Collector would be constructed by Fiscal Year 2018. However, this funding is not assured nor has an environmental document for this roadway been prepared and approved. Therefore, the North-South Collector may not be constructed by year 2024. If this project begins to develop as soon as it obtains is entitlements in Year 2014, then how much of the project may be constructed before it has impacts that would necessitate the construction of the North-South Collector? This is the amount of the Project that may be constructed of the North-South Collector. In the event the TIAR is not revised to address this question, then the applicant must not be issued any building permits until the North-South Collector is constructed.*

Response: Please see response to Comment #8.

48. *Page 15, Without Project, Projected Year 2024 Background Traffic; The TIAR states, "The Year 2024 background traffic volumes were derived using existing traffic along with trip generation obtained from the Maui Travel Demand Forecasting Model." What exactly is meant by this? Was an annual growth factor determined using the Maui Travel Demand Forecasting Model and then the existing traffic volumes increased accordingly? If so, what annual growth factor was used? Provide supporting documentation so that this growth rate may be validated. Also, what year was the Maui Travel Demand Forecasting Model approved by HDOT and what is the Horizon Year of this travel forecast?*

Response: HDOT maintains and updates the Maui Travel Demand Forecasting Model (MTDFM) which is the official State planning model. The Model is well documented in its report dated May 2008. The report is available from HDOT office upon request.

49. *Page 15, Without Project, Projected Year 2024 Background Traffic: the TIAR indicated the future Year 2024 background traffic "assumes the presence of" certain other developments. How exactly does it assume this? Were the other development project's traffic manually added in to obtain the Year 2024 volumes or were the other development projects already accounted for in the Maui Travel Demand Forecasting Model? If the answer is the latter, please provide documentation so this may be validated.*

Response: Maui Travel Demand Forecasting Model provides the basis for the projected volumes. Specific developments were examined according to their own traffic reports. For those developments consistent with Maui Travel Demand Forecasting Model, no adjustments are made. For those developments that deviate from Maui Travel Demand Forecasting Model, the adjustments were made to reflect the current changes.

50. *Page 17: The TIAR states the intersection of Liloa Drive and Lipoa Street, "appears to be fully actuated currently." The TIAR in the same paragraph also states, "The signal may need to be adjusted to provide a longer cycle length to accommodate additional north-south through traffic." If indeed the signal is fully actuated and not coordinated (as indicated it is not in the Synchro analysis sheet in the appendix of the TIAR), then the signal's cycle length would automatically be increased in response to increased traffic; therefore, the signal would not need to be adjusted.*

Response: The actuated signal can adjust its cycle length automatically based on the real time traffic condition subject to a preset range. It will not be able to adjust its cycle length beyond the preset limit. The adjustment is necessary based on the future validation.

51. *Page 22, and Page 39; The 5% transit share mode split is too high, particularly for the Year 2024 scenario which it was assumed the Maui Bus system will continue to operate within the Kihei area with multiple routes at a frequency of one per hour with only there being a possibility of increased frequency at that time, as indicated on Page 21 of the TIAR. Given the capacity of a Maui bus is about 65 passengers (45 seats and standing room for 20 additional passengers. See Attachment H), at a frequency of one bus per hour, the 5% transit mode split would exceed the capacity of the bus itself, even assuming there were no passengers already on the bus when it stopped on the MRTP site. It would be incorrect to assume a frequency any higher than existing since funding is not in place for such service in the future.*

Response: The Applicant has consulted with HDOT and the 5% transit share reduction has been removed from the Revised TIAR analysis.

52. *Page 22, Table 3; Page 39, Table 7; and, Page 40, Table 8;*
- The text of the TIAR states, "Internal capture rate was devised using ITE methodology," but it does not state the percentage assumed. What percentage internal capture rate was used? This percentage should be indicated in the TIAR. Additionally, copies of the ITE worksheets used to determine the amount of internal capture should be provided in an appendix of the TIAR; otherwise, the internal capture rates used cannot be validated. ITE worksheets as shown in the ITE Trip Generation Handbook, 2nd Edition should be*

used. (See Attachment I for a copy of a blank worksheet from the ITE Trip Generation Handbook, 2nd edition.)

Response: Please see response to Comment #12.

- Provide a trip generation table without any reductions for internal capture and mode split, rather than just a trip generation summary table, so it is clear what trip reductions are being taken. See Attachment J for the trip generation for this project without any trip reduction taken. An example of the data that should be shown in the trip generation tables for a mixed use development, as recommended in ITE's Transportation Impact Analysis for site Development is provided on Page 3 of Attachment C.

Response: The trip generation tables have been expanded to better illustrate the total trip generation in the Revised TIAR.

- Provide average daily traffic (ADT) for each phase of the development. Providing this information is an easy way to gauge the size of each development phase.

Response: The Applicant will conduct analysis according to HDOT standards and requirements.

- ITE Land Use Code 750 is "office park" not "retail". An email dated July 9, 2012 from project facilitator Steve Perkins (Attachment K), indicates ITE code 814 should be shown in the trip generation table instead of ITE Code 750.

Response: This is a typo that has been corrected in the Revised TIAR.

- The Trip Generation Summary table should show the specific number of different types of residential land uses proposed and their ITE Land Use Codes rather than showing "various."

Response: The trip generation tables have been expanded to show a breakdown by residential land use in the Revised TIAR.

53. Page 22, Trip Assignment: the TIAR states, "A summary of regional travel patterns within the Kihei area was created from the Maui travel demand model. MRTP traffic was assigned to the projected roadway network using this distribution." Please describe in more detail how the project trip distribution and assignment were determined. Was a select zone assignment run to determine trip distribution? If not, why not? If so, a copy of it should be included in the appendix of the TIAR so the distribution and assignment may be validated.

Response: Trip distribution was based on Year 2030 Person Trip Distribution using the Maui Travel Demand Forecasting Model dated May 2008. Please also see our response to Comment # 48.

54. Page 22, Trip Assignment and Page 40, Trip Assignment; The TIAR states, "Internal traffic was distributed between the residential, hotel, school, employment, and retail commercial land uses." On what technical basis was it determined how to distribute internal traffic among the hotel and school(s) and other land uses on site? ITE methodology provides internal capture rates among residential, commercial office and commercial retail land uses only. Also, provide a figure showing this internal traffic distribution.

Response: Please see response to Comment #12.

55. Page 23, Figure 6: Figure 6 depicts the projects traffic assignment. A similar figure should be provided showing the projects trip distribution. It's difficult to validate the projects trip assignment without being provided a trip distribution figure.

Response: Please see response to Comment #53.

56. Page 25, table 4: A footnote should be added to this table to let the reader know what the abbreviation BG means.

Response: The table has been revised for clarity.

57. Page 29: the TIAR states, "The intersection of Piilani Highway and Lipoa Street/Lipoa Parkway is projected to require double southbound Piilani left turns and widening of the eastbound and westbound Lipoa approach." How long will the southbound dual left turn lanes need to be to prevent vehicles in these lanes from spilling out into the through lanes thereby increasing the potential for rear end collision on Piilani Highway?

Response: Please see response to Comment #41.

58. Page 37: the TIAR states that the to address without Project Year 2034 conditions the mauka collector should be constructed between Mokulele Highway to a point on Piilani Highway south of the MRTTP. What are some possible points on Piilani highway the southern terminus of the mauka collector could intersect Piilani Highway?

Response: Please see response to Comment #20.

59. Page 39: the TIAR states Table 7 summarized the trips generated by the Project which can be accommodated by a 2-lane mauka collector. Provide technical data so this may be validated. Also what capacity was assumed for the 2-lane mauka collector? Finally, is a mauka roadway assumed in the Year 2035 roadway network in the travel forecast currently underway by HDOT for the Maui County Long Range Land Transportation Plan?

Response: Regarding the mauka collector, please see response to Comment #20.

The capacity of the 2-lane mauka collector was derived at 1,460 passenger cars per hour per lane for the highway segment (Level of Service at D) according to 2000 Highway

Capacity Manual. The intersection capacity is estimated to range from half of the highway segment capacity to 2/3 of that.

The mauka collector is not in the year 2030 Maui LRTP. HDOT is currently updating Year 2035 Maui LRTP.

60. *Page 40, Trip Assignment: the TIAR states, "The traffic generated by the proposed MRTP Development was directionally distributed and assigned to the future roadway network." How was it decided how to distribute and assign the Project trips? Was a Select Zone Assignment run? If so, include a copy of it in an appendix of the TIAR so the distribution may be validated; if not, provide technical data supporting the distribution assumed.*

Response: Year 2030 Person Trip Distribution from the MTDFM (daily trips) was used as a basis for trip distribution. Please also see our response to Comments # 48.

61. *Page 40, Trip Assignment: The TIAR states, "the four; lane mauka collector can support more MRTP than the two-lane configuration." How much more traffic can it support? What was assumed capacity of both the two-lane and four-lane configuration (Peak hour and ADT)?*

Response: Please see response to Comment #59.

62. *Page 59, TDM Measures: The TIAR says a TDM measure is to, "Encourage alternate work schedules and off peak hours for employment generators". How will this be encouraged?*

Response: To the extent feasible, the Applicant will encourage and work with future Park business owners to offer alternate work schedules and off peak hours to employees.

63. *Page 60: the TIAR states, "The project impacts the Piilani Highway/ Piikea Avenue and Liloa Drive/Piikea Avenue intersection but accounts for a relatively small percentage of the total peak hour traffic." Identify mitigation for these impacts and pay a fair share for the mitigation.*

Response: Please see response to Comment #18. The developer will pay fair share of mitigation.

64. *Page 60: The TIAR state, "Analysis of projected 2020-2034 conditions indicates that a four-lane mauka collector road will likely be warranted sometime in the Build out of Phase 2." Provide all data supporting this statement so it may be validated. Also, how much of Phase 2 may be constructed before a four-lane mauka roadway is requested? The project cannot develop beyond this point or it would have traffic impacts not disclosed in the DEIS.*

Response: The TIAR describes two scenarios, one with the 2-lane mauka collector and one with the 4-lane mauka collector. The 2-lane scenario represents how much of Phase 2 can be accommodated by the 2-lane collector. The 4-lane scenario represents the entirety of Phase 2 being constructed.

Specific Comments to the Air Quality Study (Appendix L of the DEIS):

65. *Page 14: The Air Quality Study says, "Project construction activities will also likely obstruct the normal flow of traffic at time to such an extent that overall vehicular emissions in the project area will temporarily increase. The only means to alleviate this problem will be to attempt to keep roadways open during peak traffic hours and to move heavy construction equipment and workers to and from construction areas during periods of low traffic volume. Thus, most potential short term air quality impacts from project construction can be mitigated." Why doesn't MRTTP attempt to mitigate its short term impacts to air quality resulting from vehicular emissions by keeping roadways open (particularly Piilani Highway) during peak traffic hours and utilize off-peak traffic hours to move heavy equipment and construction workers during non-peak traffic hours?*

Response: A recommendation was made in the air quality study to mitigate construction impacts by keeping roadways open during peak traffic hours and to utilize off-peak traffic hours to move heavy equipment and construction workers to and from the site. The applicant will work with future developers of the Park to require their contractors to abide by these mitigation measures during the period of construction. To the extent that this is feasible, developers will be required to specify in construction contracts that these measures shall be followed.

66. *The Air Quality Study says, "It is estimated that carbon monoxide emissions, for example, will go down by an average of about 20 percent per vehicle during the next 10 years due to the replacement of older vehicles with newer models." While this estimation does not seem unreasonable, based on what data was this estimation made? Supporting data should be provided in the Air quality Study.*

Response: As indicated in the Air Quality Study, motor vehicle emission estimates, both future and existing, were made using the U.S. EPA's motor vehicle emission model (MOBILE6.2). MOBILE6.2 emission estimates show that motor vehicle carbon monoxide emissions can be expected to decrease by about 20% during the next 10 years.

67. *Air Quality impacts are underestimated due to the TIAR's underestimate of the Project's traffic. The same comment applies to noise impacts.*

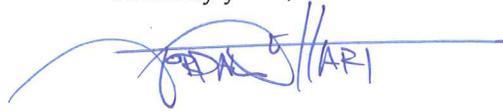
Response: Based on the review of the revised TIAR dated February 2013 it is the opinion of the air quality consultant that further air quality analysis for this project is unnecessary because it is unlikely that the air quality results and conclusions would change significantly. (See: Appendix K-1 "Letter from Air Quality Consultant")

Based on the review of the revised TIAR dated February 2013 it is the opinion of the acoustic consultant that further acoustic analysis for this project is unnecessary because it is unlikely that the acoustic results and conclusions would change significantly. (See: Appendix L-1 "Letter from Acoustic Study Consultant") (See: Attachments 9 and 10)

Ms. Victoria Huffman
Response Letter
March 1, 2013
Page 21 of 21

Thank you again for providing us with your comments. Please feel free to call Ms. Jennifer Maydan, AICP or Mr. Brett Davis at (808) 242-1955 should you have any questions.

Sincerely yours,



Jordan E. Hart
President

ENCLOSURES

CC. Mr. Steve Perkins, Pacific Rim Land, Inc.
Project File 08-132

NEIL ABERCROMBIE
GOVERNOR



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

GLENN M. OKIMOTO
DIRECTOR

Deputy Directors
JADE T. BUTAY
FORD N. FUCHIGAMI
RANDY GRUNE
JADINE URASAKI

IN REPLY REFER TO:

STP 8.0971

RECEIVED

SEP 27 2012

CHRIS HART & PARTNERS, INC.
Landscape Architecture and Planning
CC: Overt 08/13/12

September 20, 2012

Mr. Steve Perkins
Project Manager
Maui R&T Partners, LLC
1300 North Holopono, Suite 201
Kihei, Hawaii 96753

Dear Mr. Perkins:

Subject: Maui Research and Technology Park (MRTP) Master Plan Update
Draft Environmental Impact Statement (DEIS)
Maui County Change in Zoning (CIZ) and Community Plan
Amendment (CPA)
TMK: (2) 2-2-024:001-009, 014-018, 031-032, 034, 036-046 and
2-2-002:054 (por.)

The State Department of Transportation (DOT) previously commented on the DEIS in its letter STP 8.0942 dated August 14, 2012 (attached) and now offers the following supplemental comments.

The DOT Highways staff has completed its review of the DEIS and the Traffic Impact Analysis Report (TIAR). DOT is concerned with the impacts the proposed Maui Research and Tech Park (MRTP) development will have on the capacity of Piilani Highway. The increased land use will cause vehicular capacity, operational, and safety impacts to Piilani Highway. Piilani Highway currently operates at Level of Service (LOS) "C" but DOT estimates the highway to operate at LOS "F" in horizon year 2035. However as recommended in the Maui Long-Range Land Transportation Plan dated February 1997, the North/South Collector Road (Liloa Drive Extension) located to the West of and parallel to Piilani Highway that extends from Uwapo Road to Kanani Road, should be considered in the TIAR.

DOT offers the following comments on the TIAR:

1. The TIAR shall be revised for DOT review and acceptance prior to approval of a change of zone. The TIAR shall provide and validate all recommended mitigation measures for potential project-related traffic impacts on State highway facilities to the satisfaction of the DOT.
2. Additional improvements to the existing access from the Lipoa Parkway shall be subject to the review and approval of the DOT.

Attachment 1

3. The new vehicular access from the proposed Hookena Street/Piilani Highway intersection, opposite the existing East Waipulani Road right-turn in and right-turn out intersection, may be allowed subject to the review approval of DOT and prior to the approval of the change in zone. The existing 80-foot wide permitted vehicular access at that approximate location shall be validated.
4. The operation and safety of the Old East Welakahao Road/Piilani Highway intersection, located approximately 1,200 feet South of the existing East Welakahao Road (North)/Piilani Highway intersection, shall be subject to the review and approval of the DOT. Concern exists regarding the additional vehicular traffic from the proposed vehicular access to the MRTP from the Old East Welakaho Road (not a State highway facility).
5. The Trip Generation rate for each land use Institute of Transportation (ITE) code, based on the ITE Trip Generation, should be indicated in the Trip Generation Summary Tables. The ITE mid-rise apartment code 223 should not be used for the entire 1,250 dwelling units (DU) since 750 DU of those units are planned for single family.
6. The internal capture rate should be indicated and justified for each land use and shall be subject to review and acceptance by DOT. DOT generally limits the internal capture rate to 15% maximum.
7. The use of a 5% reduction for transit share is not acceptable, as the ITE Trip Generation rates already take into account transit share.
8. The Liloa Drive Extension (North/South Collector Road located of and parallel to Piilani Highway between Kaonoulu Street and Kanani Road) and the proposed North/South Collector Road (located Mauka of Piilani Highway to provide direct access to Mokulele Highway) shall not be included in any analysis. Neither project is listed in the Statewide Transportation Improvement Program and is not committed.
9. The TIAR shall provide analysis for year 2024 and year 2034 traffic conditions "without the project" and "with the project" and including only committed roadway projects assumed to be in place. Under this scenario, the Liloa Drive Extension North/South Collector Road Makai of and parallel to Piilani Highway and the proposed North/South Collector Road Mauka of Piilani Highway should not be included in the analysis.
10. LOS "D" or better shall be required for all movements along Piilani Highway at the intersections with Lipoa Parkway, Hookena Street, and Old East Welakahao Road, with the project and with transportation mitigations.
11. The study intersections shall include all intersections along Piilani Highway where traffic is projected to increase by 5% or more with the project.

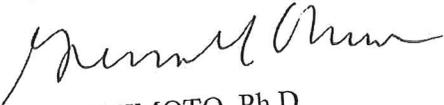
Mr. Steven Perkins
September 20, 2012
Page 3

STP 8.0971

12. The TIAR shall provide a schedule of phases and timing of recommended mitigative transportation improvements of each respective phase and development thresholds to guide implementation of mitigative measures.
13. Recommendations for mitigation shall also include the Applicant's fair share contribution to the cost of regional improvements to State highways and/or traffic mitigation measures that will help to alleviate the transportation impacts generated by the project, as determined by the Applicant and DOT.

DOT appreciates the opportunity to provide comments. If there are any questions, including the need to meet with DOT staff, please contact Mr. Garrett Smith of the DOT Statewide Transportation Planning Office at telephone number (808) 831-7976.

Very truly yours,


GLENN M. OKIMOTO, Ph.D.
Director of Transportation

Attachment: Ltr. STP 8.0942 Dtd. 08/14/12

c: Daniel Orodener, Land Use Commission
Brett Davis, Chris Hart & Partners, Inc.

NEIL ABERCROMBIE
GOVERNOR



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

GLENN M. OKIMOTO
DIRECTOR

Deputy Directors
JADE T. BUTAY
FORD N. FUCHIGAMI
RANDY GRUNE
JADINE URASAKI

IN REPLY REFER TO:

STP 8.0942

August 14, 2012

Mr. Steve Perkins
Project Manager
Maui R&T Partners, LLC
1300 North Holopono, Suite 201
Kihei, Hawaii 96753

Dear Mr. Perkins:

Subject: Maui Research and Technology Park Master Plan Update -
Draft Environmental Impact Statement (DEIS), Maui County
Change in Zoning (CIZ) and Community Plan Amendment (CPA)
TMK: (2) 2-2-024:001-009, 014-018, 031-032, 034, 036-046 and
2-2-002:054 (por)

Thank you for requesting the State Department of Transportation's (DOT) review of the subject project. DOT understands the applicant is seeking to update the Master Plan for the Maui Research and Technology Park. The vision is to transform the current single use large lot research and technology campus into an integrated and vibrant mixed use community focused around a regional high technology employment base.

Given that access to the project will be from Piilani Highway, the DOT has an interest in the subject project. DOT Highways Division is still conducting its review and will provide additional comments as necessary.

DOT appreciates the opportunity to provide comments. If there are any questions, including the need to meet with DOT staff, please contact Mr. Garrett Smith of the DOT Statewide Transportation Planning Office at telephone number (808) 831-7976.

Very truly yours,

A handwritten signature in black ink, appearing to read "Glenn M. Okimoto".

GLENN M. OKIMOTO, Ph.D.
Director of Transportation

c: Daniel Orodener, LUC
Brett Davis, Chris Hart & Partners

Public Works

Capital Improvement Program

Project Name: North-South Collector Road

CBS No: CBS-1064

Department: Department of Public Works

District: Kihei-Makena

Project Type: Road Improvements

Anticipated Life: 30 years

| Prior Years | Current Appr | Ensuing | Subsequent Years | | | | | Total |
|-------------|--------------|---------|------------------|---------|---------|-----------|-----------|------------|
| Expend/Ench | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | 6-Year |
| 0 | 0 | 0 | 0 | 800,000 | 800,000 | 8,300,000 | 8,300,000 | 18,200,000 |

PROJECT DESCRIPTION

To construct two roadway segments of the North/South Collector road. Phase I will be the segment from Kaonoulu Street to Waipuilani Road and Phase II, Lokelani School to Kanani Road. Funding request sequence as follows: Phase I: FY 2015 - Design and Environmental Assessment, FY 2017 - Construction phase. Phase II: FY 2016 - Design and Environmental Assessment, FY 2018 - Construction phase.

PROJECT JUSTIFICATION

Project necessary to alleviate traffic congestion for vehicular travel in the North-South direction in South Maui. Traffic on South Kihei road is already gridlocked in morning and afternoon peak hours. Future development in the Kihei-Makena areas will add to the congestion South Maui residents are already experiencing.

STRATEGIC PLAN ALIGNMENT

Department's Strategic Plan

Countywide Priority Results

Goal #3: Identify and resolve traffic congestion, circulation and safety issues.

Objective 3.1: Address capacity and circulation issues by installing additional lanes, acceleration/deceleration lanes, install traffic control devices at major intersections and creation of new roadway systems.

A Suitable Public Infrastructure
 A Strong, Diversified Economy
 A Prepared, Safe, and Liveable County
 A Healthy and Sustainable Community

Operating Impact Narrative

No significant impact on staffing or operations anticipated.

FUNDING DETAILS

| Phase Description | Fund Code | Current Appr | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | FY 2018 |
|-------------------|-----------|--------------|---------|---------|---------|---------|-----------|-----------|
| Design | GB | 0 | 0 | 0 | 800,000 | 800,000 | 0 | 0 |
| New Construction | FD | 0 | 0 | 0 | 0 | 0 | 6,000,000 | 6,000,000 |
| New Construction | GB | 0 | 0 | 0 | 0 | 0 | 1,500,000 | 1,500,000 |
| Other | GB | 0 | 0 | 0 | 0 | 0 | 800,000 | 800,000 |

Schedule of Activities

| Activity | Start | End | Amount |
|---------------------------------|------------|------------|------------|
| Design | 07/01/2014 | 07/31/2016 | 1,600,000 |
| New Construction | 10/01/2016 | 02/28/2017 | 15,000,000 |
| Other | 10/01/2016 | 02/28/2017 | 1,600,000 |
| Total Capital Project Costs | | | 18,200,000 |
| Total O&M Costs | | | 0 |
| Total Capital & Operating Costs | | | 18,200,000 |

| Methods of Financing (Ensuing + 5 Years) | |
|--|------------|
| Funding Source | Amount |
| Federal Fund | 12,000,000 |
| General Obligation Fund | 6,200,000 |
| Total Funding Requirements | 18,200,000 |

Maui Research and Technology Park Meeting Minutes

Date 10-16-2012

Time: 130-245PM HST

Topic: DOT Comment Letter on the Draft EIS/ TIAR

Attendance:

DPW: David Goode/ Rowena Dagdag-Andaya/ Nolly Yagin

DOT Maui HW: Fred Cajigal/ Charlene Shibuya

MRTP: Steve Perkins

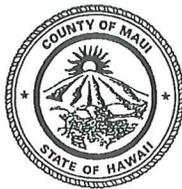
CH&P: Chris Hart/Jennifer Maydan/ Brett Davis

- Maui Public Works and State DOT Maui Highways both agree that it is not a matter of "if" the N-S Collector road will be developed, it is a matter of "when". There are many details involved, but eventually the road will be built. Best guess on timeline is 5-7 years. During that time Public Works will have to go through the environmental assessment and Special Management Area permitting process, which will include public comments. We agreed to engage in the process and advocate for the roadway at public hearings, with community groups, etc to help expedite the development of the remaining segments of the N/S collector road. David Goode noted that the Mayor is in support of the N/S collector road.
- Public works and Maui officials from Hawaii DOT supported our idea of an in-tract north south transportation network mauka of Piilani Highway. We introduced them to the concept that MRTP was building nearly a mile and a half of a N/S roadway that could be used as a mauka collector road to provide relief from Piilani Highway.
- The process of adding the roadways to the state's planning documents begins with the long-term transportation plan. We will make sure the necessary roadways are in that document, and later make sure they are advocated for inclusion in the STIP. The plan will come out in early 2013. After this plan is released, the Dept. of Public Works should start working on the south Maui regional traffic study. We pointed out to them that they had more money allocated to the study than they thought, so we'll follow up on this to make sure it stays top of mind.
- We have all the info needed from public works in preparation for our 10/29 meeting with Hawaii DOT in Honolulu.

CHARMAINE TAVARES
Mayor

MILTON M. ARAKAWA, A.I.C.P.
Director

MICHAEL M. MIYAMOTO
Deputy Director



RALPH NAGAMINE, L.S., P.E.
Development Services Administration

CARY YAMASHITA, P.E.
Engineering Division

BRIAN HASHIRO, P.E.
Highways Division

**COUNTY OF MAUI
DEPARTMENT OF PUBLIC WORKS
ENGINEERING DIVISION**

200 SOUTH HIGH STREET
WAILUKU, MAUI, HAWAII 96793

October 13, 2008

Telephone: (808) 270-7745
Fax: (808) 270-7975

MEMO TO: Tamara Horcajo, Director
Department of Parks and Recreation

THROUGH: Cary Yamashita, Chief
Engineering Division

FROM: Milton Arakawa, Director
Department of Public Works

COPY TO: Pat Matsui
Planning and Development Division
Department of Parks and Recreation

**SUBJECT: MEMORANDUM OF UNDERSTANDING FOR CONSTRUCTION OF
OFFSITE ROADWAY IMPROVEMENTS IN THE VICINITY OF SOUTH
MAUI COMMUNITY PARK [TMK (2) 2-2-002:042]**

This confirms that the following roadway improvements, in the vicinity of the proposed South Maui Community Park, have been incorporated into the Engineering Division's Capital Improvements 6-Year Plan for projects programmed into the STIP for Federal Funding:

- Second left turn lane at intersection of Piilani Highway / Piikea Avenue (for east or mauka bound traffic on Piikea Avenue making left turns onto Piilani Highway, to head north on Piilani Highway); and,
- Traffic signals (when warranted) at the existing intersection of Piilani Highway / Welakahao Street.

In addition, a 4-way stop is expected to be incorporated into the future intersection of Liloa Drive and Welakahao Street as part of the future North-South Collector Road Improvements project (currently under design by Engineering Division).

If you have any questions, please call Joe Krueger of Engineering Division at 270-7745.

CY/JK(ED08-681)
S:\ENGVALL\Joel\Letters\194-Park.wpd

ALAN M. ARAKAWA
Mayor

WILLIAM R. SPENCE
Director

MICHELE CHOUTEAU McLEAN
Deputy Director



RECEIVED

AUG 14 2012

CHRIS HART & PARTNERS, INC.
Landscape Architecture and Planning

CC: Bret
08/13/12

COUNTY OF MAUI
DEPARTMENT OF PLANNING

August 13, 2012

Mr. Daniel E. Orodenker, Executive Director
State of Hawaii Land Use Commission
P.O. Box 2359
Honolulu, Hawaii 96804-2359

Dear Mr. Orodenker:

SUBJECT: DRAFT ENVIRONMENTAL IMPACT STATEMENT (EIS) FOR THE PROPOSED LAND USE DISTRICT BOUNDARY AMENDMENT (DBA) FOR THE MAUI RESEARCH & TECHNOLOGY PARK MASTER PLAN, AT KIHEI, MAUI, HAWAII; TMK(S): (2) 2-2-024:001-009; 014-018; 031; 032; 034; 036-046; AND (2) 2-2-002:054 (POR.) (EAC 2012/0013)

The Department of Planning (Department) is in receipt of the above-referenced document for the proposed petition to amend the land use boundary to effect a district reclassification of approximately 256.243 acres of land situated at Kihei, Maui, Hawaii, from the Agricultural District to the Urban District for the Maui Research & Technology Park. The Department understands the proposed action includes the following:

- The Applicant is Maui R&T Partners, LLC;
- The Applicant is requesting a Land Use DBA for a reclassification of approximately 256.243 acres of land from the Agricultural District to the Urban District and the land is identified by Tax Map Key (TMK) Parcel Nos. (2) 2-2-024:016 and 017 and a portion of (2) 2-2-002:054. Additionally, the project will require amendments to the conditions placed upon currently urbanized lands, comprising approximately 157.76 acres;
- The Approving Agency is the Land Use Commission of the State of Hawaii;
- The proposed project will require an amendment to the Kihei-Makena Community Plan (CPA) from Project District 6, Public/Quasi Public, and Agricultural to a District that better aligns with the Maui Research & Technology Park Master Plan strategic vision and changes of Maui County Code (MCC), Title 19.33 "Kihei Research & Technology Park District." The CPA will require approval by the Maui County Council;
- The proposed project will require a Maui County Change in Zoning (CIZ) in order to bring the entire Park site into the Research and Technology Park District, whereas portions of the Park are currently zoned Agricultural. The CIZ will require approval by the Maui County Council; and

- The CPA and anticipated "off-site" infrastructure work affecting State and County "rights-of-way" are "triggers" for the preparation of an EIS.

Based on the foregoing, the Department provides the following comments of the Draft EIS:

1. The Department concurs that the Petition to amend the land use district boundary of certain lands consisting of 256.243 acres from the Agricultural District to the Urban District is related to TMK Nos. (2) 2-2-024:016, and 017, and (2) 2-2-002:054 (POR.);
2. The Department concurs that the proposed CPA and anticipated use of State and County lands are "triggers" that require compliance with Chapter 343, Hawaii Revised Statutes (HRS);
3. The Department concurs that the State Land Use Commission shall be the Approving Agency for the EIS pursuant to Chapter 343, HRS;
4. On June 23, 2010, the Applicant filed a petition with the State Land Use Commission for a DBA from Agriculture to Urban for certain lands as identified;
5. The Applicant has filed a Consolidated Application for a CPA and CIZ for the Project which shall be reviewed by the Maui Planning Commission and Maui County Council;
6. The Draft EIS that looks at the Maui Research & Technology Park Master Plan Update as a whole shall include Transportation Demand Management Measures along with a Traffic Impact and Analysis Report (TIAR) for the project which shall seek to reduce or mitigate traffic impacts. Applicable and relevant updates to these reports should be provided on a timely basis at project milestones as changes in the timing and project scope may occur over the duration of the project;
7. The Draft EIS that looks at the Maui Research & Technology Park Master Plan Update as a whole shall state how the project will provide affordable housing in accordance with the County's Workforce Housing Policy as applicable and require that the Applicant coordinate with the Department of Housing and Human Concerns an appropriate affordable housing program per Maui County requirements;
8. The Department strongly recommends that this project as a whole be reviewed by the Maui County Urban Design Review Board (UDRB) to allow for a discussion of project design as it will include residential, civic, and commercial mixed-use components, along with areas of open space and parks. Review by

the UDRB may involve multiple meetings due to the scope and complexity of this project;

9. The County of Maui is currently reviewing the Draft Maui Island Plan that proposes a Directed Growth Strategy to establish urban growth boundaries and the land area under review for this Petition for a DBA from the Agricultural District to the Urban District is within the proposed urban growth boundaries of the Draft Maui Island Plan. Please include a map of the Draft Maui Island Plan Kihei-Makena growth area boundary and include the location of the Maui Research & Technology Park site; and
10. The Department concurs that the location and timing of a Kihei-Mauka North-South Collector Road is an unresolved issue as the schedule for the development of this roadway is uncertain at this time. In order to create an interconnected Kihei-Mauka transportation network in advance of the potential development of a Kihei-Mauka Collector Road, the Department strongly recommends that the Applicant consider designating and designing Ninau Street as a "complete street" with on street dedicated bicycle lanes, pedestrian facilities, median and through travel lanes, that would connect with North-South roadways of adjacent future development mauka of Pi'ilani Highway.

Thank you for the opportunity to comment. Should you require further clarification, please contact Staff Planner Kurt Wollenhaupt at kurt.wollenhaupt@mauicounty.gov or at (808) 270-1789; Staff Planner Kathleen Kern of the Long Range Division at kathleen.kern@mauicounty.gov or at (808) 270-7841; or Staff Planner Paul Critchlow of the Zoning Administration and Enforcement Division at paul.critchlow@mauicounty.gov or at (808) 270-5795.

Sincerely,



WILLIAM SPENCE
Planning Director

xc: Clayton I. Yoshida, AICP, Planning Program Administrator (PDF)
Aaron H. Shinmoto, PE, Planning Program Administrator (PDF)
John F. Summers, Planning Program Administrator (PDF)
Kathleen Kern, Staff Planner (PDF)
Paul B. Critchlow, Staff Planner (PDF)
Kurt F. Wollenhaupt, Staff Planner (PDF)
Brett Davis, Chris Hart & Partners, Inc.
Project File
General File

WRS:KFW:cr

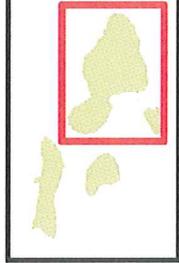
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Regional Transportation Network

Island of Maui

Legend

- Primary Road
- Secondary Road
- Bike Path
- ✈ Airport
- Proposed
- Conceptual Transit Station
- Conceptual Transit Corridor
- Lahaina Bypass
- Road or Highway
- Bike Path
- Upcountry Greenways Plan
- Maui Island Plan Greenways



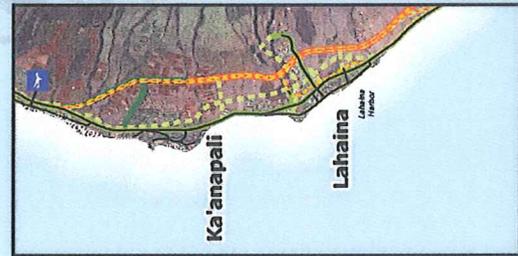
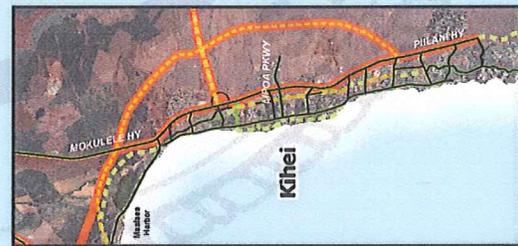
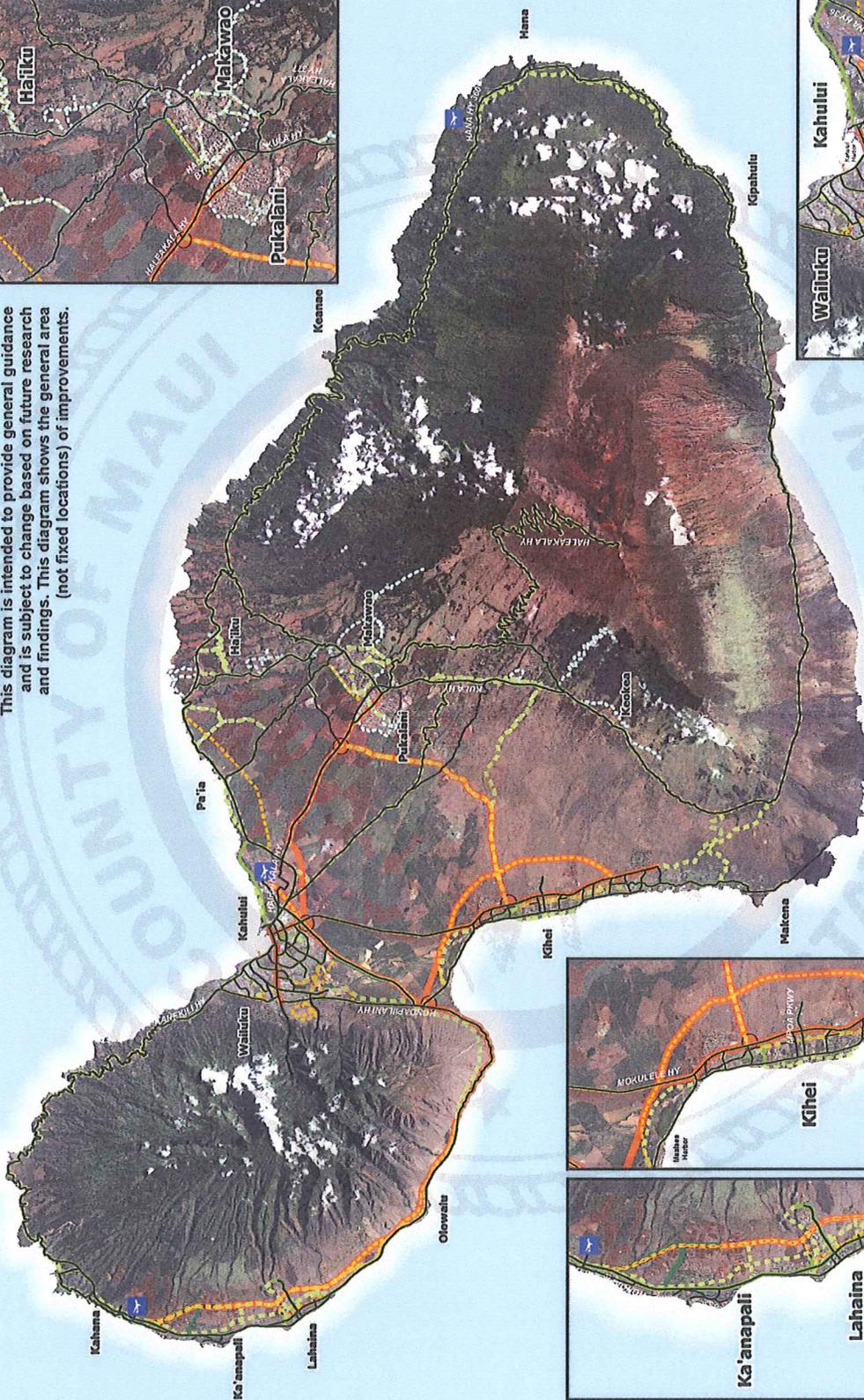
0 1 2 3 4 5 Miles

Project Code: UCCT_201202001
 Copyright © September 20, 2012
 This is not a zoning map. Please contact the Planning Department for Zoning confirmation.

Prepared By:
 Long Range Planning Division
 Department of Planning
 County of Maui
 260 South High Street
 Wailuku, Hawaii 96793

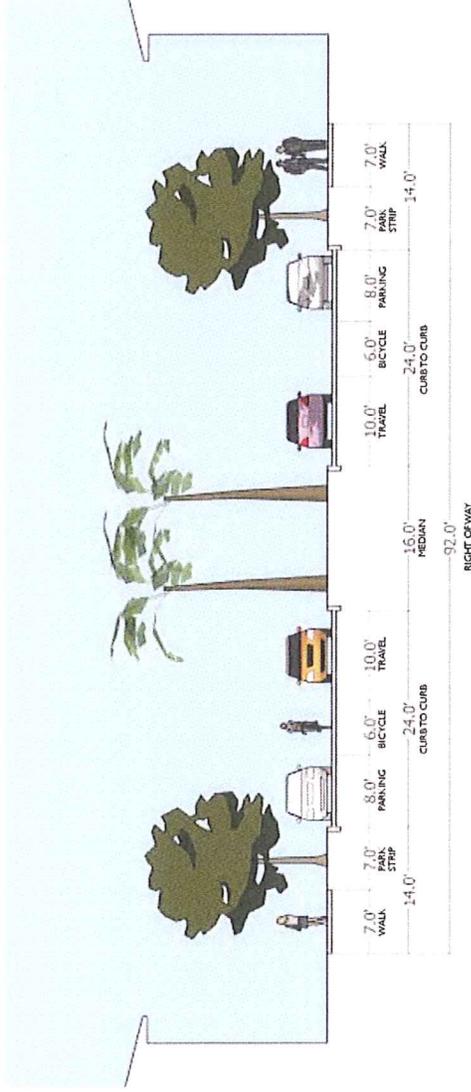
Diagram 6-1

This diagram is intended to provide general guidance and is subject to change based on future research and findings. This diagram shows the general area (not fixed locations) of improvements.

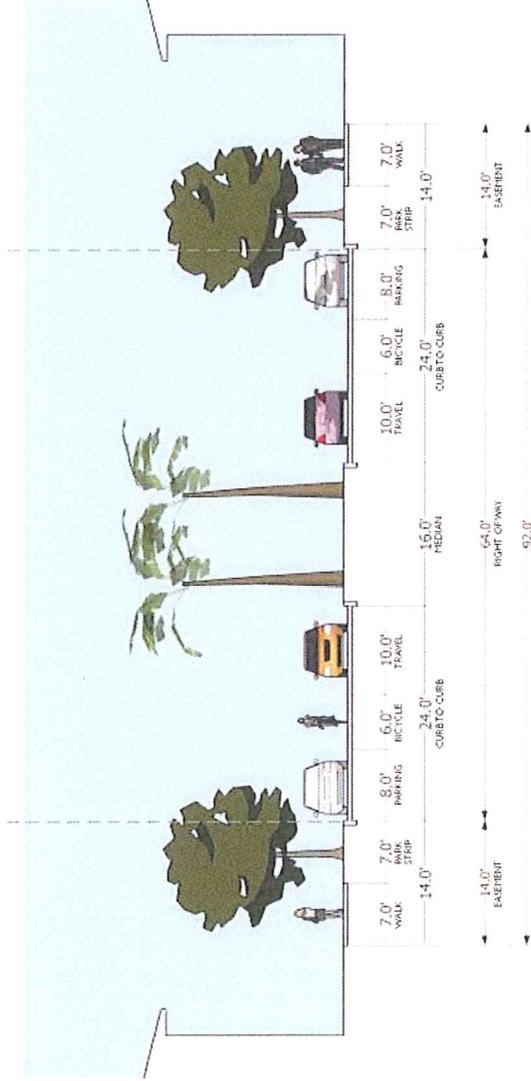


B1

NORTH - SOUTH GREENWAY



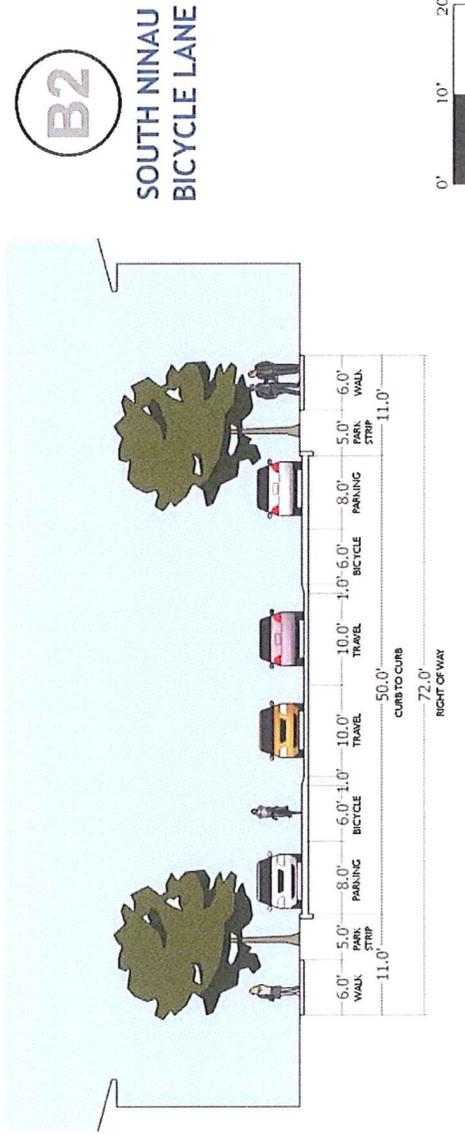
**NINAU STREET
(Final,
North - South
Greenway Format)**



**TYPICAL SECTION
NORTH-SOUTH GREENWAY**

**FIGURE NO. 37b1
TYPICAL STREET SECTIONS**

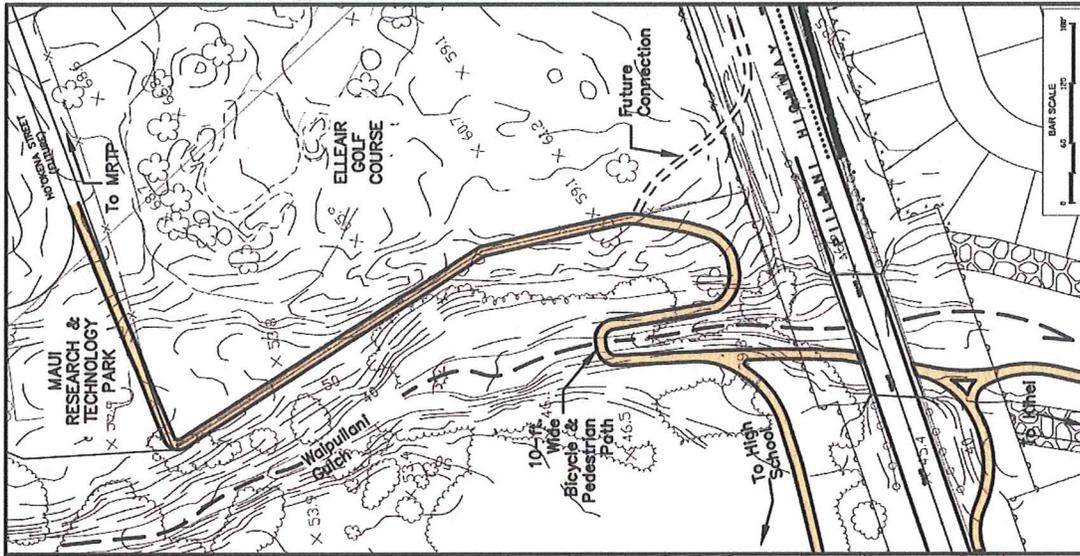
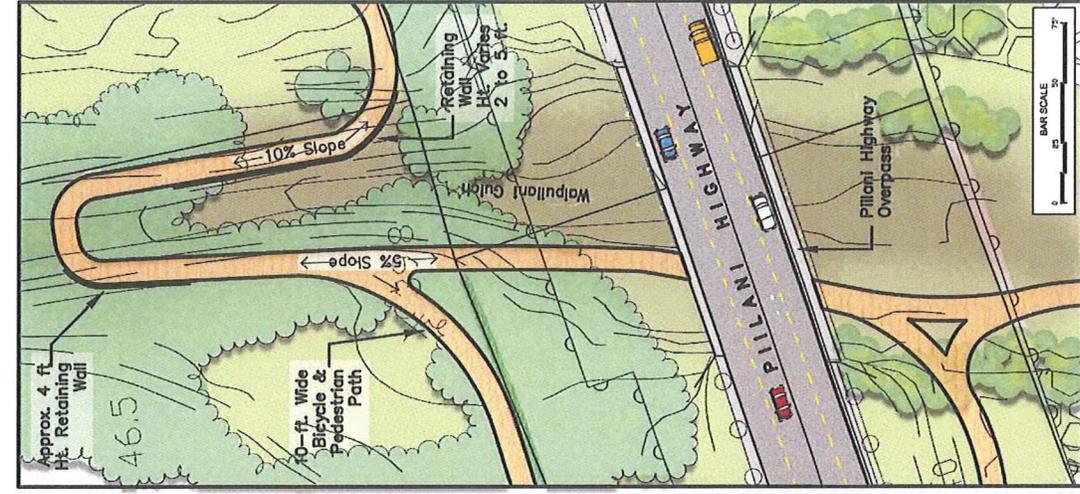
Source: Calthorpe Associates and Chris Hart & Partners, February 2013.



TYPICAL SECTION
NORTH-SOUTH GREENWAY

Source: Caithropo Associates and Chris Hart & Partners, February 2013.

FIGURE NO. 37b2
 TYPICAL STREET SECTIONS



NORTH PEDESTRIAN & BIKE CONNECTION PLAN - DRAFT

MAUI RESEARCH & TECHNOLOGY PARK

KIHEI, MAUI, HAWAII



PROJECT: 06-132
DATE: 10/15/12



B.D. NEAL & ASSOCIATES

Applied Meteorology • Air Quality • Computer Science

P.O. BOX 1808 • KAILUA-KONA, HAWAII 96745 • TELEPHONE (808) 329-1627 • FAX (808) 325-6739
EMAIL: bdneal@bdneal.com

February 25, 2013

Attn: Mr. Brett Davis
Chris Hart and Partners, Inc.
115 N. Market St.
Wailuku, HI 96793

Subject: Maui Research & Technology Park
Review of Air Quality Study (Rev. 1)

Dear Mr. Davis:

I have reviewed the Traffic Impact Analysis Report (TIAR) dated February 2013 for the subject project and compared this to the TIAR prepared previously in February 2012. The February 2012 TIAR was the basis for the analysis of traffic-related air quality impacts that we prepared for this project in May 2012. Although the revised TIAR includes additional roadway intersections and additional future scenarios, the expected future traffic volumes with or without the project have not changed significantly. Hence, although the air quality study for this project has not been revised to specifically reflect the revised TIAR, based on the relatively small differences in the expected traffic volumes, it is unlikely that the air quality results and conclusions would change significantly. That is, we would expect that carbon monoxide concentrations along roadways in the project area will remain well within state and federal ambient air quality standards with or without the project at least through the year 2034.

Based on my review of the updated traffic study dated February 2013, it is my professional opinion that further air quality analysis for this project is unnecessary because it is unlikely that the air quality results and conclusions would change significantly. Please call me if you would like to discuss this matter further.

Very truly yours,

Barry D. Neal
Certified Consulting
Meteorologist

Attachment 9

Y. Ebisu & Associates

Acoustical and Electronic Engineers

1126 12th Ave., Room 305
Honolulu, Hawaii 96816
Ph. (808) 735-1634 – Fax (808) 732-0409
e-mail: ebisuyassoc@aol.com

February 22, 2013

Pacific Rim Land, Inc.
P.o. Box 220
1300 North Holopono, Suite 201
Kihei, Hawaii 96753

Attention: Mr. Steve Perkins
Project Coordinator

Subject: Changes to April 2012 Noise Study for Maui Research and Technology Park,
Kihei, Maui, Hawaii

Dear Mr. Perkins:

I used the Revised February 2013 Traffic Impact Analysis Report (TIAR) for the Maui Research and Technology Park (MRTP) to develop my revisions to the conclusions of my April 2012 Acoustic Study for the Maui Research and Technology Park. The following conclusions regarding future traffic noise levels in the MRTP environs were based on an examination of the changes in traffic volumes from the February 2012 to the Revised February 2013 TIAR, and the use of logarithmic (or decibel, dB) scaling factors to revise the traffic noise level results contained in my original April 2012 traffic noise study.

The following general conclusions were possible as a result of my examination of the Revised February 2013 TIAR:

1. No changes regarding existing traffic noise levels occurred.
2. Existing traffic noise levels along Piilani Highway from East Waipulani Road to Kaonoulu Street were similar to those previously reported for areas north of East Waipulani Road.
3. Existing traffic noise levels along Kaonoulu and Kulanihako Streets west of Piilani Highway are 50 DNL (Day-Night Sound Level) or less at 100 feet setback distance from their centerlines.
4. By 2024, increases in non-project traffic noise levels are anticipated to be between zero and 1.1 DNL greater than those originally reported in my noise study. By 2024, project related traffic noise increases along Piilani Highway are expected to be slightly lower (between zero and 0.5 DNL) than those originally reported in my noise study.

5. By 2034, increases in non-project traffic noise levels are anticipated to be between 0.8 and 1.2 DNL greater than those originally reported in my noise study. By 2024, project related traffic noise increases along Piilani Highway are also expected to be greater (between 0.9 and 1.5 DNL) than those originally reported in my noise study.

6. By 2024, no significant changes in traffic noise levels along Lipoa Parkway or along East Welakahao Street east of Piilani Highway should occur from my prior noise study.

7. By 2034, increases in traffic noise levels along Lipoa Parkway without and with the MRTP and regional roadway improvements were 4.7 and 2.0 DNL (respectively) greater than in my prior noise study.

I have also attached my revisions to Chapter I. Summary of my April 2012 noise study report, which incorporate this current review of the Revised 2013 TIAR. The italicized text in parentheses were deletions from my April 2012 noise study report.

Let me know if you have any questions regarding these findings. If you require copies of my revised report tables, let me know.

Sincerely,



Yoichi Ebisu, P.E.

encl.

CHAPTER I. SUMMARY

The existing and future traffic noise levels in the vicinity of the planned Maui Research and Technology Park (MRTP) in Kihei, Maui were evaluated for their potential impacts and their relationship to current FHA/HUD noise standards for noise sensitive land uses. The traffic noise level increases along the roadways servicing the project site (see Figure 1) were calculated. Significant increases in traffic noise levels at noise sensitive properties are not expected to occur as a result of project traffic following project build-out by CY 2024 and 2034.

Along Piilani Highway fronting the project site, traffic noise levels of approximately 70 DNL are expected to increase to approximately 71 to 73 (71) DNL at 100 foot distance from the centerline by CY 2024 as a result of project and non-project traffic. By CY 2034, traffic noise levels along Piilani Highway are expected to increase by 1 to 3 DNL units along Piilani Highway with or without the MRTP and regional roadway improvements. *(be reduced to existing noise levels following completion of the proposed north-south collector road on the mauka side of the project site).*

The largest increases (1.5 to 10.4 DNL) *(1.4 to 7.7 DNL)* in project related traffic noise are predicted to occur along Lipoa Parkway, East Welakahao Street east of Piilani Highway, along Lipoa Street west of Piilani Highway, and along South Kihei Road south of East Lipoa Street. Adverse traffic noise impacts along Lipoa Parkway and East Welakahao Street are not expected to occur since noise sensitive developments are not planned to be located along those two roadways. The noise sensitive buildings along Lipoa Street west of Piilani Highway have adequate setback distances from Lipoa Street, such that predicted CY 2024 and CY 2034 traffic noise levels should remain in the "Moderate Exposure, Normally Acceptable" category at these buildings. For these reasons, traffic noise mitigation measures should not be required.

The project site is planned such that noise sensitive residential uses of the project are situated at very large setback distances from Piilani Highway, where existing and future traffic noise levels are predicted to be less than 61 (60) DNL. The large buffer distances to the highway will allow for the use of naturally ventilated buildings on the project site.

The dominant traffic noise sources in the project environs will continue to be traffic along Piilani Highway and South Kihei Road. In addition, the addition of the proposed north-south collector road mauka of the project will increase the existing background ambient noise levels at the mauka end of the project site and along the proposed corridors of the collector road and connecting roadways.

Unavoidable, but temporary, noise impacts may occur during construction of the proposed project, particularly during the excavation and earth moving activities on the project site. Because construction activities are predicted to be audible within the

project site and at nearby properties, the quality of the acoustic environment may be degraded to unacceptable levels during periods of construction. Mitigation measures to reduce construction noise to inaudible levels will not be practical in all cases, but the use of quiet equipment and compliance with State Department of Health construction noise regulations are recommended as standard mitigation measures.

NEIL ABERCROMBIE
GOVERNOR

MAJOR GENERAL DARRYLL D. M. WONG
DIRECTOR OF CIVIL DEFENSE

DOUG MAYNE
VICE DIRECTOR OF CIVIL DEFENSE



PHONE (808) 733-4300
FAX (808) 733-4287

STATE OF HAWAII
DEPARTMENT OF DEFENSE
OFFICE OF THE DIRECTOR OF CIVIL DEFENSE
3949 DIAMOND HEAD ROAD
HONOLULU, HAWAII 96816-4495

RECEIVED

AUG 10 2012

PACIFIC RIM LAND, INC.
MAUI - MAIN

August 7, 2012

Mr. Steve Perkins
Maui R & T Partners, LLC
1300 North Holopono, Suite 201
Kihei, Hawaii 96753

Dear Mr. Perkins:

Draft Environmental Impact Statement (DEIS)
Maui Research and Technology Park Master Plan Update
Island of Maui, Makawao District

Thank you for the opportunity to comment on this proposed development.

The proposed mixed-use development will increase the residential population in an area with limited safe room options. As a result, we strongly recommend incorporation of hardening measures for safe rooms within planned residential facilities, and the hardening of proposed community facilities so as to withstand high-wind and seismic events.

Additionally, although the bulk of the proposed development has siren coverage from the new Kihei Community Center siren, we ask that one omni 121 db(c) directional siren be installed on the northeast section of the property.

We defer to the appropriate state and federal agencies as to the protection of coastal and marine environment as well as the cultural, historical, and archeological elements of the property.

If you have any questions please call Havinne Okamura, Hazard Mitigation Planner, at (808)733-4300, extension 556.

Sincerely,

 EXECUTIVE
OFFICER

For DOUG MAYNE
Vice Director of Civil Defense



Landscape Architecture
City & Regional Planning

December 19, 2012

Mr. Doug Mayne, Vice Director
State of Hawaii, Dept. of Defense
Office of the Director of Civil Defense
3949 Diamond Head Road
Honolulu, HI 96816-4495

Dear Mr. Mayne,

RE: Comments on the Draft Environmental Impact Statement for the Proposed Maui Research and Technology Park Master Plan update, located in Kihei, Maui, Hawaii at TMK's: (2) 2-2-024:1-9,14-18,31,32, 34, 36-46 and (2) 2-2-002:054 (por.)

Thank you for your letter of August 7, 2012 providing comments on the above referenced project. The Applicant will take into consideration your recommendation to incorporate hardening measures for safe rooms within planned residential facilities and community facilities so as to withstand high-wind and seismic events. Additionally, as requested in your letter, the Applicant will install one (1) omni 121 db (c) directional siren on the northeast section of the Maui Research and Technology Park.

Thank you again for providing us with your comments. Please feel free to call myself or Mr. Brett Davis of our office at (808) 242-1955 should you have any questions.

Sincerely yours,

Jordan E. Hart
President

CC. Mr. Steve Perkins, Pacific Rim Land, Inc.
Project File 08-132 ✓



Landscape Architecture
City & Regional Planning

March 1, 2013

Mr. Doug Mayne, Vice Director
State of Hawaii, Dept. of Defense
Office of the Director of Civil Defense
3949 Diamond Head Road
Honolulu, HI 96816-4495

Dear Mr. Mayne,

RE: Comments on the Draft Environmental Impact Statement for the
Proposed Maui Research and Technology Park Master Plan update,
located in Kihei, Maui, Hawaii at TMK's: (2) 2-2-024:1-9,14-18,31,32, 34,
36-46 and (2) 2-2-002:054 (por.)

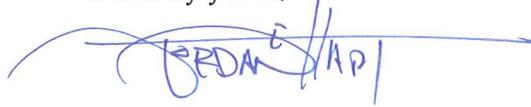
Thank you for your letter of August 7, 2012; this letter supersedes the response letter dated December 19, 2012 to conform to HAR §11-200-22(c)(2) Review of Environmental Impact Statements, *"Response letters reproduced in the text of the final EIS shall indicate verbatim changes that have been made to the text of the draft EIS."* The following language is in the final EIS and can be found in Section III C. 6.

In response to comments from Civil Defense the Applicant will take into consideration the recommendation to incorporate hardening measures for safe rooms within planned residential facilities and community facilities so as to withstand high-wind and seismic events. Additionally, as requested in the letter, the Applicant will install one (1) Omni 121 db(c) directional siren on the northeast section of the Maui Research and Technology Park. (See: Table 28).

Mr. Doug Mayne, Vice Director
Civil Defense Response Letter
MRTP DEIS
March 1, 2013
Page 2 of 2

Thank you again for providing us with your comments. Please feel free to call Mr. Brett Davis of our office at (808) 242-1955 should you have any questions.

Sincerely yours,



Jordan E. Hart
President

CC. Mr. Steve Perkins, Pacific Rim Land, Inc.
Project File 08-132



The Senate

STATE CAPITOL
HONOLULU, HAWAII 96813

August 7, 2012

State of Hawaii, Land Use Commission
Department of Business, Economic
Development & Tourism
State of Hawaii
Attn: Mr. Daniel Orodener
P. O. Box 2359
Honolulu, Hawaii 97804-2359

Maui R&T Park, LLC
Attn: Mr. Steve Perkins
1300 North Holocono
Suite 201
Kihei, Hawaii 96753

Chris Hart & Partners, Inc.
Attn: Mr. Michael Summers
115 North Market Street
Wailuku, Hawaii 96793

Re: Draft Environmental Impact Statement Maui Research and Technology Park

Dear Gentlemen:

I am writing to express my concern that the Draft Environmental Impact Statement (DEIS) submitted for the above Project does not adequately address safe access to the new Kihei High School to be built immediately adjacent to the Project. While the Overall Concept Diagram found at page 152 of the DEIS shows a school connection over the intervening gulch, the DEIS contains no discussion of when that connection will be constructed, by whom and who will pay for it. Nor does the DEIS discuss the impact on health and safety should a connection between the Project and the new high school *not* be built.

I call your attention to the Federal Highway Administration's Safe Routes to School Program (<http://safety.fhwa.dot.gov/saferoutes/>) and to the National Center for Safe Routes to School (www.saferoutesinfo.org), both of which focus on the design, development and implementation of safe routes to school. Providing our children with safe ways to get to and from school without having to rely on the automobile promotes safety, overall health, a sense of place and choice.

The DEIS recognizes that high school students residing in the Project will attend the new high school, but the plans show no means for these children to do so without having to exit the Project and enter the high school by means of Pi'ilani Highway, a four lane heavily traveled, and often above the speed limit, road. More importantly, Pi'ilani Highway lacks sidewalks and adequate bicycle lanes, in part because it is not designed for pedestrian traffic. It is essential, therefore, that the Project plan, construct and fund the means for students to get to and from school other than by way of the State highway and presumably via a pedestrian and bicycle bridge connecting the school to the Project.

I'm sure you are aware that we have an obesity epidemic in America and Hawai'i. Data show that obesity among Hawaii's children is increasing, just as it is across the nation. Experts have identified the automobile-centric design of our communities and neighborhoods as a key cause of the epidemic. Poor community design causes us to walk and bike less. This results in less exercise, fewer calories burned and weight gained. In 2004 the National Centers for Disease Control published a paper entitled "The Role of Schools in Preventing Childhood Obesity" which states: "The obesity epidemic is one of the greatest public health, social and economic challenges of the 21st century." The full report can be found here. (http://www.cdc.gov/healthyyouth/physicalactivity/pdf/roleofschools_obesity.pdf). The report notes that walking and biking to school is a key way to address the growing public health problem: youth must be given safe transportation alternatives that promote walking and bicycling to and from school safely. The Project, as presented, lacks this critical and basic ingredient.

Absent a means for Project residents to access the Kihei High School safely by foot or bicycle without having to do so by means of Pi'ilani Highway is a serious flaw. The Project must be planned and implemented in such a way that it meets the health and safety needs of the people of my district. I respectfully request that a finalized project affirmatively address this serious flaw.

Mahalo for your favorable consideration of these comments and request.

Sincerely,



Rosalyn H. Baker

SENATOR

District 5 – South and West Maui



**CHRIS
HART**
& PARTNERS, INC.

Landscape Architecture
City & Regional Planning

November 30, 2012

Ms. Rosalyn H. Baker, Senator
District 5 - South and West Maui
The Senate, State Capitol
Honolulu, HI 96813

Dear Senator Baker,

RE: Comments on the Draft Environmental Impact Statement for the Proposed Maui Research and Technology Park (MRTP) Master Plan update, located in Kihei, Maui, Hawaii at TMK's: (2) 2-2-024:1-9,14-18,31,32, 34, 36-46 and (2) 2-2-002:054 (por.)

Thank you for your letter of August 7, 2012, I am pleased to provide the following responses to your comments:

While both the applicant and the Department of Education acknowledge the importance of direct pedestrian and bicycle access between the MRTP and the future Kihei High School, the type and timing of connection is uncertain at this time. A direct route of access for bicycles and pedestrians is being considered in the Waipuilani gulch area near Piilani highway. (See: Attachments) The applicant has discussed pedestrian and bicycle connectivity options with the Department of Education team assigned to the future Kihei High School and we have agreed to keep in close contact as development plans for the High School are being refined. The applicant will work with the Department of Education, the owner of Waipuilani Gulch, and other government and community stakeholders towards resolving the issue of pedestrian connectivity.

We agree that providing a safe transportation alternative from the MRTP to the Kihei High School site without using Piilani Highway will provide a tremendous amenity to this area of Kihei and the applicant is committed to working with the DOE and other stakeholders to create such a solution.

Ms. Rosalyn H. Baker
MRTP Comment Response Letter
November 30, 2012
Page 2 of 2

Thank you again for providing us with your comments. Please feel free to call Ms. Jennifer Maydan, AICP or Mr. Brett Davis of our office at (808) 242-1955 should you have any questions.

Sincerely yours,



Jordan Hart
Vice President

ENCLOSURES

Cc: Mr. Steve Perkins, Pacific Rim Land, Inc.
Project File 08-132

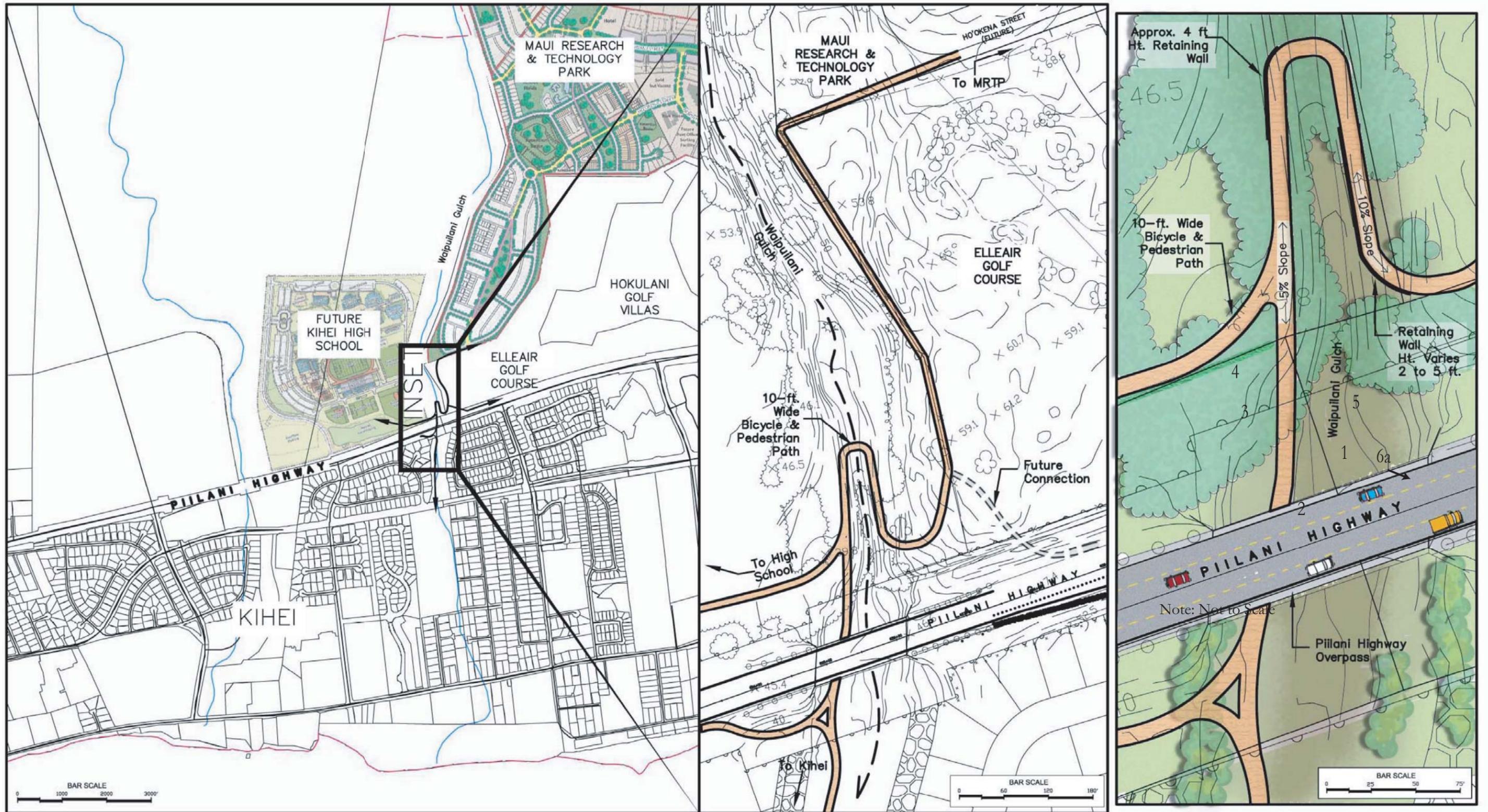


Figure 40
 Conceptual Pedestrian and Bicycle
 Connection to Kihei High School

Maui Research &
 Technology Park



**CHRIS
HART**
& PARTNERS, INC.

Landscape Architecture
City & Regional Planning

March 1, 2013

Ms. Rosalyn H. Baker, Senator
District 5 – South and West Maui
The Senate, State Capitol
Honolulu, HI 96813

Dear Senator Baker,

RE: Comments on the Draft Environmental Impact Statement for the Proposed Maui Research and Technology Park (MRTP) Master Plan update, located in Kihei, Maui, Hawaii at TMK's: (2) 2-2-024:1-9,14-18,31,32, 34, 36-46 and (2) 2-2-002:054 (por.)

Thank you for your letter of August 7, 2012; this letter supersedes the response letter dated November 30, 2012 to conform to HAR §11-200-22(c)(2) Review of Environmental Impact Statements, *"Response letters reproduced in the text of the final EIS shall indicate verbatim changes that have been made to the text of the draft EIS."* The following language is in the final EIS and can be found in Section III D. 1.

In response to comments from the DOE, and Senator Rosalyn H. Baker, The Applicant is coordinating with the DOE, Kihei Community and other applicable landowners, to plan for a direct bicycle and pedestrian connection will be made between the neighboring Kihei High School and the Maui Research and Technology Park; (See: Figure 40, "Conceptual Pedestrian and Bicycle Connection to Kihei High School"). This conceptual pedestrian and bicycle path proposes to pass under Piilani highway at Waipuilani gulch to facilitate a future linkage between the north-south bike and pedestrian trail along Liloa Drive and future development to the east (mauka) of the MRTP.

Ms. Rosalyn H. Baker
Comment Response Letter
MRTP DEIS
March 1, 2013
Page 2 of 2

Thank you again for providing us with your comments. Please feel free to call Ms. Jennifer Maydan, AICP or Mr. Brett Davis of our office at (808) 242-1955 should you have any questions.

Sincerely yours,



Jordan E. Hart
President

ENCLOSURES

Cc: Mr. Steve Perkins, Pacific Rim Land, Inc.
Project File 08-132

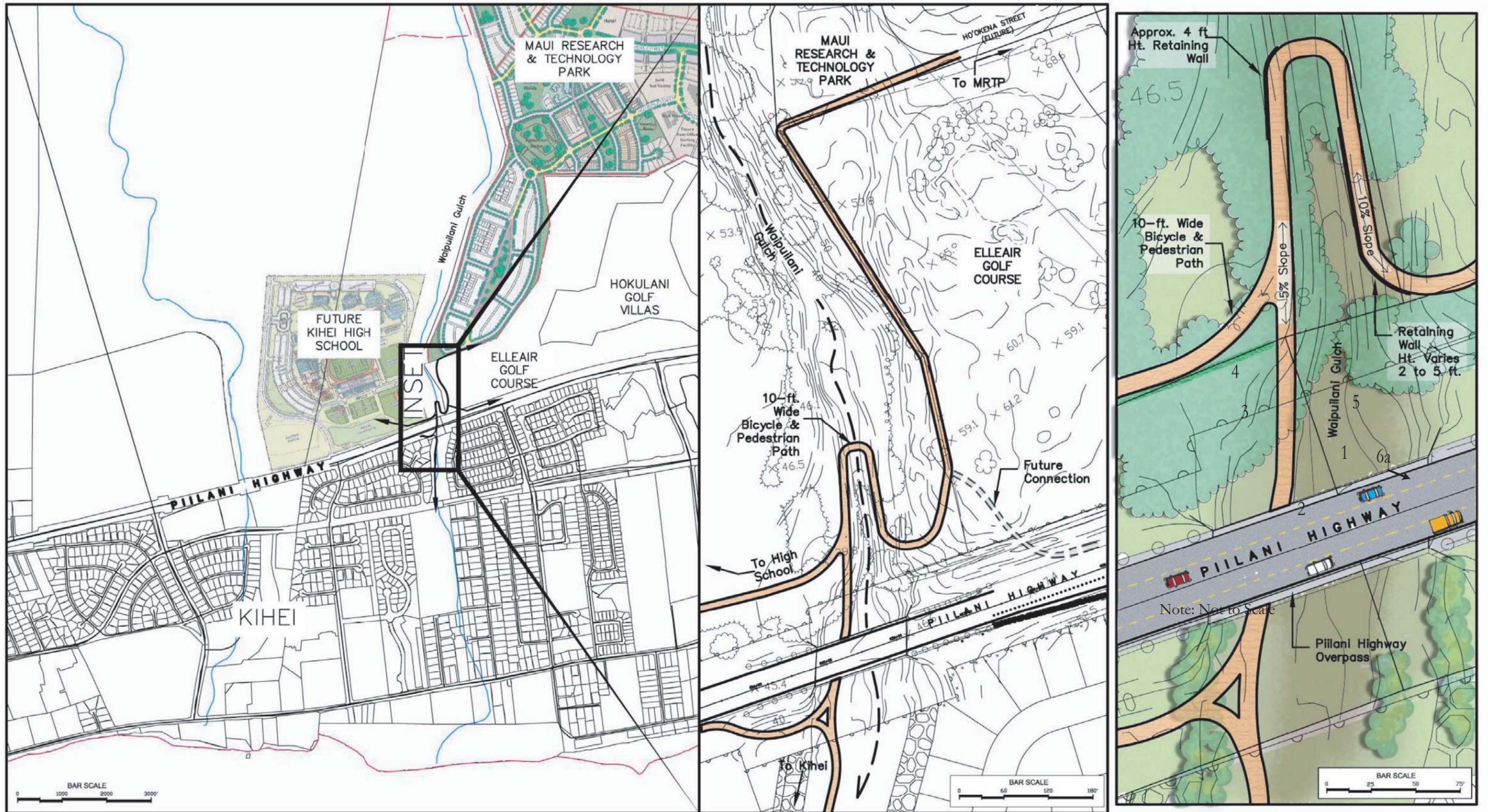
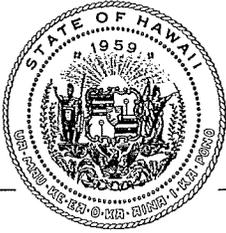


Figure 40
Conceptual Pedestrian and Bicycle
Connection to Kihei High School



**DEPARTMENT OF BUSINESS,
ECONOMIC DEVELOPMENT & TOURISM**

NEIL ABERCROMBIE
GOVERNOR
RICHARD C. LIM
DIRECTOR
MARY ALICE EVANS
DEPUTY DIRECTOR
JESSE K. SOUKI
DIRECTOR
OFFICE OF PLANNING

OFFICE OF PLANNING

235 South Beretania Street, 6th Floor, Honolulu, Hawaii 96813
Mailing Address: P.O. Box 2359, Honolulu, Hawaii 96804

Telephone: (808) 587-2846
Fax: (808) 587-2824

RECEIVED

AUG 10 2012

CHRIS HART & PARTNERS, INC.
Landscape Architecture and Planning

cc: Brett 081132

Ref. No. P-13688

August 8, 2012

To: Daniel E. Orodener, Executive Director
Land Use Commission

From: Jesse K. Souki, Director

Subject: A10-787 Maui R&T Partners. Draft Environmental Impact Statements Prepared Pursuant to Hawaii Revised Statutes Chapter 343, for Maui Research and Technology Park Master Plan Update, Prepared in Support of a Consolidated Application for Community Plan Amendment and Change in Zoning Application. Kihei, Makawao, Island of Maui, TMK: 2-2-24: 01-07, 08, 09, 14-18, 32, 34, 36-46; and 2-2-002: Por. 54

Thank you for the opportunity to review and comment upon the Draft Environmental Impact Statement (DEIS), to update the Master Plan for the Maui Research and Technology Park (MRTP).

The Master Plan proposes to expand the current MRTP area of approximately 157.76 acres containing about 180,000 square feet of office space, laboratory, and data center space. About 400 people currently work within the MRTP at over 20 companies. The Petitioner is proposing to expand the MRTP by reclassifying an additional 256.243 acres from Agricultural to Urban, on TMK parcels 2-2-024: 16, 17; 2-2-002: por. 54. The expansion will allow the MRTP to utilize Smart Growth and New Urbanism to develop an integrated mixed use community around a regional knowledge-based industry. The MRTP total area of approximately 414 acres (existing and proposed) will include the following components: employment core, knowledge-based industry expansion; mixed use village center, residential areas; and an open space network and parks. According to page 4 of the DEIS, the Master Plan will be implemented in two phases through 2034. Infrastructure improvements will be tied to each phase of the development.

On February 25, 1986, the original Petition was approved by the Land Use Commission (LUC) for the current Maui Research and Technology Park (A84-585), for about 111 acres of land in Increment 1. In the LUC's Amended Findings of Fact, Conclusions of Law, and Decision and Order, the Commission also approved a second increment of approximately 111 acres of land, plus another 39 acres on land within Tax Map Key 2-2-02: por. 42, subject to rules relating to incremental redistricting.

We have the following comments and concerns on the DEIS:

1. Information should be included in the DEIS on this previous LUC docket, and also including information on the incremental redistricting. We also note that the Petitioner is proposing that additional land area be reclassified from Agricultural to the Urban District. Maps and supporting information should be provided to clearly delineate the original Petition, Increment II, and the new Petition area within the DEIS.
2. Section No. 3. Flora and Fauna. Page 8-10. We note that the Appendix C, Botanical and Faunal Survey is dated October 2008, and this survey indicates that the on-site study was conducted in October 2008. We also note a reference to the U.S. Fish and Wildlife Service (USFWS) letter dated October 28, 2010. The USFWS letter indicates that there could be several endangered species frequenting this area, and also points out that a survey should be conducted during the winter rainy months. However, no additional updated survey which surveyed the area during the winter months has been included in the DEIS. Instead, page 9 of the DEIS, paragraph 3, indicates a comprehensive survey for the endangered Blackburn's sphinx moth will be done prior to construction and land clearing. We also note that the USFWS indicates that there are critical habitats for the endangered moth in the vicinity. We would strongly recommend that an updated study should be conducted prior to the Land Use District Boundary Amendment reclassification.
3. Sustainability study. There are elements and references to a sustainable community, but we would recommend that all these items and features be consolidated into a section of its own, and possibly expanded within the DEIS. For the Land Use Boundary Amendment proceedings, a sustainability plan should be included with the Petition.
4. Page 83, 1. State Land Use District Boundary Amendment (DBA). As noted above, additional information should be included within the DEIS. A more precise description of all the uses within each area should be included, incorporating maps as well as descriptions of all/each use within the specific areas, e.g., original Petition area, Increment II, and the new proposed acreage.
5. Section 5.2.1.1. Phase 1 Improvements, #4, page 5-4, indicates that the roadway system will be designed with connectivity to adjacent developments to the north and south to facilitate the creation of a continuous roadway network mauka of Piilani Highway in order to reduce dependence on Piilani Highway. Further, we note that in the Internal Circulation section, page 5-6, this continuous roadway is identified as the North-South Greenway or Ninau Street, Figure 5-3. Figure 5-3 notes that the right-

Daniel E. Orodener
Page 3
August 8, 2012

of-way is 64 feet wide, and including a park strip and walkways, the proposed roadway width is a total of 92 feet wide. The County of Maui and the State Department of Transportation should be consulted on the proposed right-of-way dimensions, and whether it would meet requirements as a North South collector roadway potentially serving the other proposed developments mauka of Piilani Highway.

Please note that the comments and concerns indicated here regarding the DEIS do not preclude the Office of Planning from other concerns that may be brought out during subsequent LUC proceedings.

Thank you for the opportunity to review this document. If you have any questions, please contact Lorene Maki of our Land Use Division at 587-2888.

c: ✓ Ms. Jennifer Maydan and Mr. Brett Davis,
Chris Hart & Partners, Inc.
Maui R&T Partners, LLC



**CHRIS
HART**
& PARTNERS, INC.

Landscape Architecture
City & Regional Planning

January 30, 2013

Mr. Jesse K. Souki, Director
Office of Planning
State of Hawaii, DBEDT
235 South Beretania Street, 6th Floor
Honolulu, HI 96813

Dear Mr. Souki,

RE: Comments on the Draft Environmental Impact Statement for the Proposed Maui Research and Technology Park Master Plan update, located in Kihei, Maui, Hawaii at TMK's: (2) 2-2-024:1-9,14-18,31,32, 34, 36-46 and (2) 2-2-002:054 (por.)

Thank you for your letter of August 8, 2012; I am pleased to provide the following responses to your comments:

1. Historical information on the previous Land Use Commission Petition (A84-585) will be included in the Final Environmental Impact Statement (FEIS) in Section II C, Existing and Historical Land Uses. The Maps will be located in Appendix N. Supporting information is provided below to clearly delineate the original Petition, Increment II, and the new petition area. This information will also be provided in the FEIS.
 - On November 9, 1984, Maui Economic Development Board, Inc. filed its Petition for District Boundary Amendment with the Land Use Commission, State of Hawaii ("LUC") to reclassify approximately 300 acres of land in Kihei, Maui from the agricultural district to the urban district to develop a high technology park in LUC Docket No. A84-585.
 - On July 15, 1985, the LUC issued its Findings of Fact, Conclusions of Law and Decision and Order ("D&O"). The southern half of the petition area, comprising of approximately 150 acres, was reclassified to the urban district

and the northern half of the petition area was approved for incremental districting.

- The attached Figure 1-3 shows the current proposed project and identifies five areas identified as Areas A, B, C, D and E.
 - The attached Figure 1-4 depicts the LUC's ruling in its July 15, 1985 D&O by showing the urban district lands in the hatched area and the lands approved for incremental districting in the cross hatched area, as superimposed upon Areas A, B, C, D and a 20 acre area south of Area B.
 - On September 11, 1985, Maui Economic Development Board, Inc. filed its Motion to Modify Petition and to Classify Approximately 300 Acres of Land Currently in the Agricultural District into the Urban District at Kihei, Maui, Hawaii ("Motion to Modify"). The Motion to Modify requested that approximately 111 acres of urban land be relocated to the northern half, keeping approximately 39 acres remaining in the urban district.
 - On February 25, 1986, the LUC issued its Amended Findings of Fact, Conclusions of Law and Decision and Order ("Amended D&O") approving the Motion to Modify. The attached Figure 1-5 depicts the LUC's ruling in its February 25, 1986 Amended D&O by showing the urban district lands in Areas A and C as hatched, and the lands approved for incremental districting in Areas B and D as cross hatched.
2. An additional Botanical and Faunal Survey was conducted by SWCA in February and March 2011 and this follow-up survey was inadvertently left out of the DEIS. The 2011 SWCA survey and its results will be incorporated into the FEIS in Section No 3. Flora and Fauna. The follow-up survey is included as Appendix C-1. and is attached.
 3. A Sustainability Study is currently being developed for the Master Plan Update. A discussion on sustainability will be incorporated into the FEIS in Section F, MRTP Master Plan Overview, 5. Sustainability. The Sustainability Study will be included as Appendix O in the FEIS and included in the Petition.
 4. An updated description of the proposed uses within each area will be provided in the FEIS as Appendix P, Draft Ordinance Chapter 19.33A, MRTP District. The uses allowable in the original Petition area were limited to urban, technology or knowledge-based industry development. Increment II was to be converted to urban when necessary, however Increment II never developed, therefore the Master Plan update was

started in 2007 to encourage economic growth in the under-developed MRTP.

5. The Applicant is coordinating with the State Department of Transportation and pertinent County agencies on the proposed design of the North-South Greenway/Ninau Street. The Applicant will continue to coordinate with these departments to ensure that the proposed roadway design meets right-of-way requirements and facilitates the development of a north-south collector road *mauka* of Piilani Highway.

Thank you again for providing us with your response. Please feel free to call Mrs. Jennifer Maydan, AICP or Mr. Brett Davis at (808) 242-1955 should you have any questions.

Sincerely yours,



Jordan Hart
President

ENCLOSURES

CC. Mr. Steve Perkins, Pacific Rim Land, Inc.
Project File 08-132



CHRIS
HART
& PARTNERS, INC.

Landscape Architecture
City & Regional Planning

March 1, 2013

Mr. Jesse K. Souki, Director
Office of Planning
State of Hawaii, DBEDT
235 South Beretania Street, 6th Floor
Honolulu, HI 96813

Dear Mr. Souki,

RE: Comments on the Draft Environmental Impact Statement for the Proposed Maui Research and Technology Park Master Plan update, located in Kihei, Maui, Hawaii at TMK's: (2) 2-2-024:1-9,14-18,31,32, 34, 36-46 and (2) 2-2-002:054 (por.)

Thank you for your letter of August 8, 2012; this letter supersedes the response letter dated January 30, 2013 to conform to HAR §11-200-22(c)(2) Review of Environmental Impact Statements, *"Response letters reproduced in the text of the final EIS shall indicate verbatim changes that have been made to the text of the draft EIS."*

1. In response to comment 1. The following language is in the final EIS and can be found in Section II. C.

In response to comments from the State Land Use Commission and State Office of Planning the following is a historical timeline of Land Use entitlement events for the MRTP:

- On November 9, 1984, Maui Economic Development Board, Inc. filed its Petition for District Boundary Amendment with the Land Use Commission, State of Hawaii ("LUC") to reclassify approximately 300 acres of land in Kihei, Maui from the agricultural district to the urban district to develop a high technology park in LUC Docket No. A84-585.

- On July 15, 1985, the LUC issued its Findings of Fact, Conclusions of Law and Decision and Order ("D&O"). The southern half of the petition area, comprising of approximately 150 acres, was reclassified to the urban district and the northern half of the petition area was approved for incremental districting.
- Figure 1-3 shows the current proposed project and identifies five areas identified as Areas A, B, C, D and E.
- Figure 1-4 depicts the LUC's ruling in its July 15, 1985 D&O by showing the urban district lands in the hatched area and the lands approved for incremental districting in the cross hatched area, as superimposed upon Areas A, B, C, D and a 20 acre area south of Area B.
- On September 11, 1985, Maui Economic Development Board, Inc. filed its Motion to Modify Petition and to Classify Approximately 300 Acres of Land Currently in the Agricultural District into the Urban District at Kihei, Maui, Hawaii ("Motion to Modify"). The Motion to Modify requested that approximately 111 acres of urban land be relocated to the northern half, keeping approximately 39 acres remaining in the urban district.
- On February 25, 1986, the LUC issued its Amended Findings of Fact, Conclusions of Law and Decision and Order ("Amended D&O") approving the Motion to Modify. Figure 1-5 depicts the LUC's ruling in its February 25, 1986 Amended D&O by showing the urban district lands in Areas A and C as hatched, and the lands approved for incremental districting in Areas B and D as cross hatched.
- On November 20, 2007, Maui R&T Partners, LLC ("MRTP") acquired a fee simple interest in the Petition Area. MRTP has since taken over the management of the Project as well as developing the new master plan for the Project.
- On June 23, 2010, MRTP filed its Petition for District Boundary Amendment in LUC Docket No. A10-787, for the reclassification of approximately 253.05 acres from the agricultural district to the urban district ("Petition"), comprised of Areas B, D and E on Figure 1-3. The Petition proposes a redesigned Project to implement a new sustainable community based on mixed uses that will allow for people to work, live and play within or near the Project.

To reconcile the differences in the prior project with the current Project, MRTP will also be filing a motion to amend the Amended D&O to allow for the additional mixed uses in Area C. The intent is for the motion to amend to be filed in time so that the hearings in both LUC dockets may be consolidated so that the entire new Project may be considered at the same time, where Areas A and C will be subject to LUC Docket No. A84-585 and Areas B, D and E will be subject to LUC Docket No. A10-787

2. An additional Botanical and Faunal Survey was conducted by SWCA in February and March 2011 and this follow-up survey was inadvertently left out of the DEIS. The 2011 SWCA survey and its results will be incorporated into the FEIS in Section 3.A. Flora and Fauna. The follow-up survey is included as Appendix C-2. and is attached.
3. In response to comment 3. The following language is in the final EIS and can be found in Section II. F.5.

In accordance with priority guidelines and principles to promote sustainability under section 226-108 and in response to comments from DBEDT LUC and State Office of Planning a Sustainability Plan was prepared. (See: Appendix N, "Sustainability Study") When applying these principles to the MRTP some major elements are outside the control of the master plan. For instance the Parks location across from Piilani Highway makes non motorized transportation difficult. However adding housing and commercial and retail activities to the MRTP creates a mix of activities which will create a more complete community and allow people to meet all of their needs in the area. The MRTP has the opportunity to showcase workers and residents enjoying a diversity of housing, transit connectivity and quality economic development from this community.

Conservation and Restoration

Design of the MRTP will respect the existing topography and other natural features, and is therefore less damaging to construct and preserves natural systems. The MRTP will incorporate a compact designed roadway network with bicycle and pedestrian pathways to reduce automobile use. The MRTP will use recycled water when applicable including fire control, landscaping and toilets. It is estimated that 170 million gallons of water per year could be diverted away from injection wells. Approximately 300 kilowatts of photovoltaic power is used at the MRTP with another 200 kilowatts planned. The master developer will

encourage the use of as much renewable energy and distribution generation as the utility will allow. The use of drought tolerant native plants will be encouraged.

Diversity and Balance

The MRTP Master Plan provides a diversity of uses, far different than typical single-use development. The MRTP will provide residential opportunities within walking distance of commercial development to reduce commuting distances and make walking and bicycling more convenient. Residential neighborhoods will offer a diversity of housing types within a short walk of the mixed use center, and The Park's increased balance of employment and residential will help alleviate problems of commuting to work.

Human and Pedestrian Scale

The MRTP will provide a variety of activities and land uses available within a reasonable walking and bicycling distance creates an area scaled to people, not automobiles. The plan proposes streets with bike lanes and sidewalks for slow automobile traffic and nearby buildings, creating a kind of outdoor room for which will be comfortable, safe and inviting for pedestrians. Pedestrian safety measures include street parking, narrow streets, traffic calming measures, and sidewalks throughout the MRTP to promote less reliance on the automobile.

Connections and Interdependence

The MRTP will be accessible from Piilani Highway via the existing Lipoa Parkway. The Park will develop an internal roadway network that will connect the MRTP to the Piilani Highway and to surrounding developments as necessary. The MRTP will also include sidewalks and bicycle pathways to improve the efficiency and effectiveness of the transit system. As the MRTP gains employment and population, transit service will become more viable as well as more essential. The Park has been planned to work with a future transit system.

4. An updated description of the proposed uses within each area will be provided in the FEIS as Appendix O, Draft Ordinance Chapter 19.33A, MRTP District. The uses allowable in the original Petition area were limited to urban, technology or knowledge-based industry development. Increment II was to be converted to urban when necessary, however Increment II never developed, therefore the Master Plan update was started in 2007 to encourage economic growth in the under-developed MRTP.

Mr. Jesse Souki, Director
MRTP Comment Response Letter
March 1, 2013
Page 5 of 5

5. The Applicant is coordinating with the State Department of Transportation and pertinent County agencies on the proposed design of the North-South Greenway/Ninau Street. The Applicant will continue to coordinate with these departments to ensure that the proposed roadway design meets right-of-way requirements and facilitates the development of a north-south collector road *mauka* of Piilani Highway.

Thank you again for providing us with your response. Please feel free to call Mrs. Jennifer Maydan, AICP or Mr. Brett Davis at (808) 242-1955 should you have any questions.

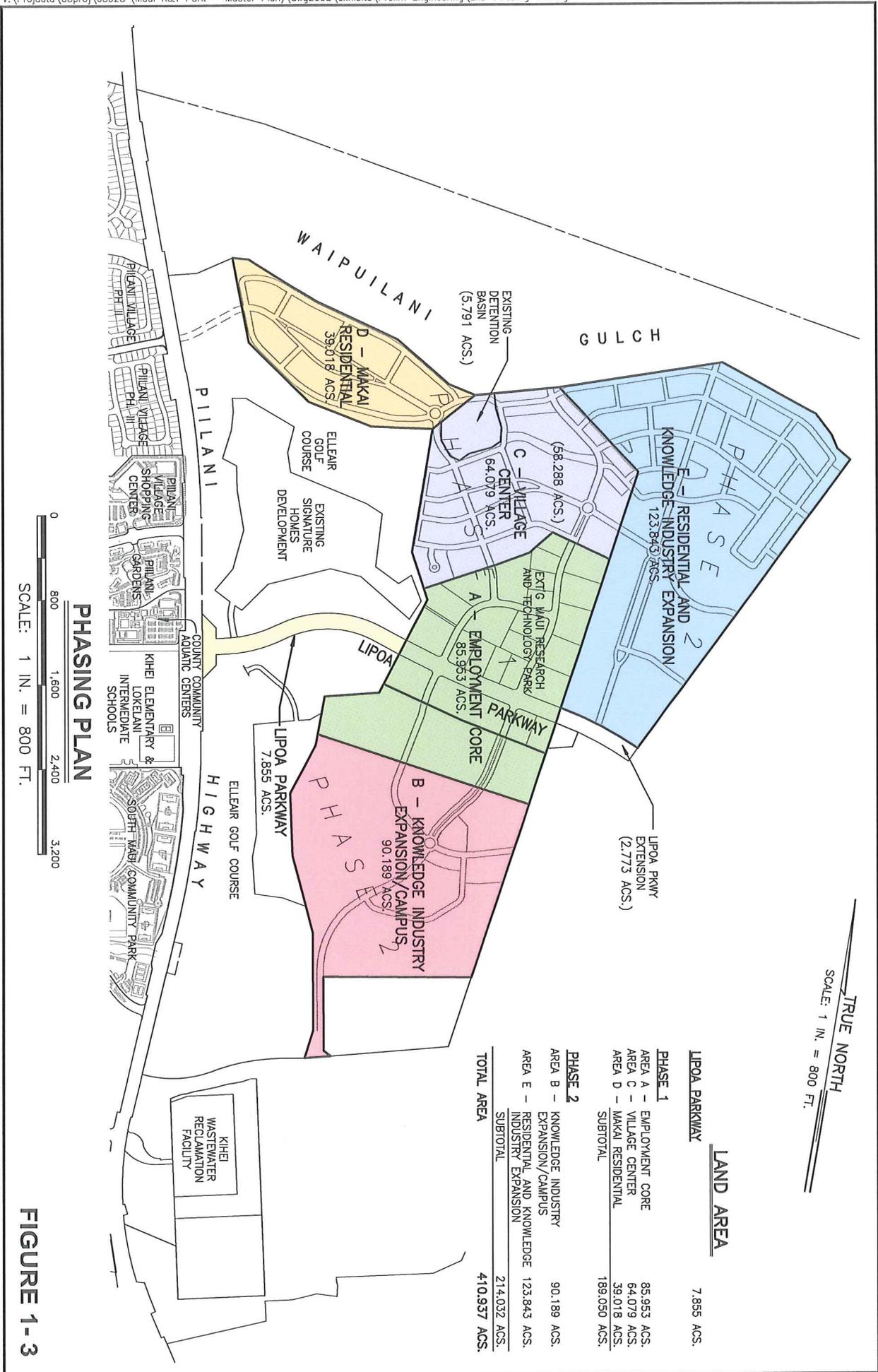
Sincerely yours,

A handwritten signature in blue ink, appearing to read "JORDAN HART", with a long horizontal flourish extending to the right.

Jordan Hart
President

ENCLOSURES

CC. Mr. Steve Perkins, Pacific Rim Land, Inc.
Project File 08-132



0 800 1,600 2,400 3,200
 SCALE: 1 IN. = 800 FT.

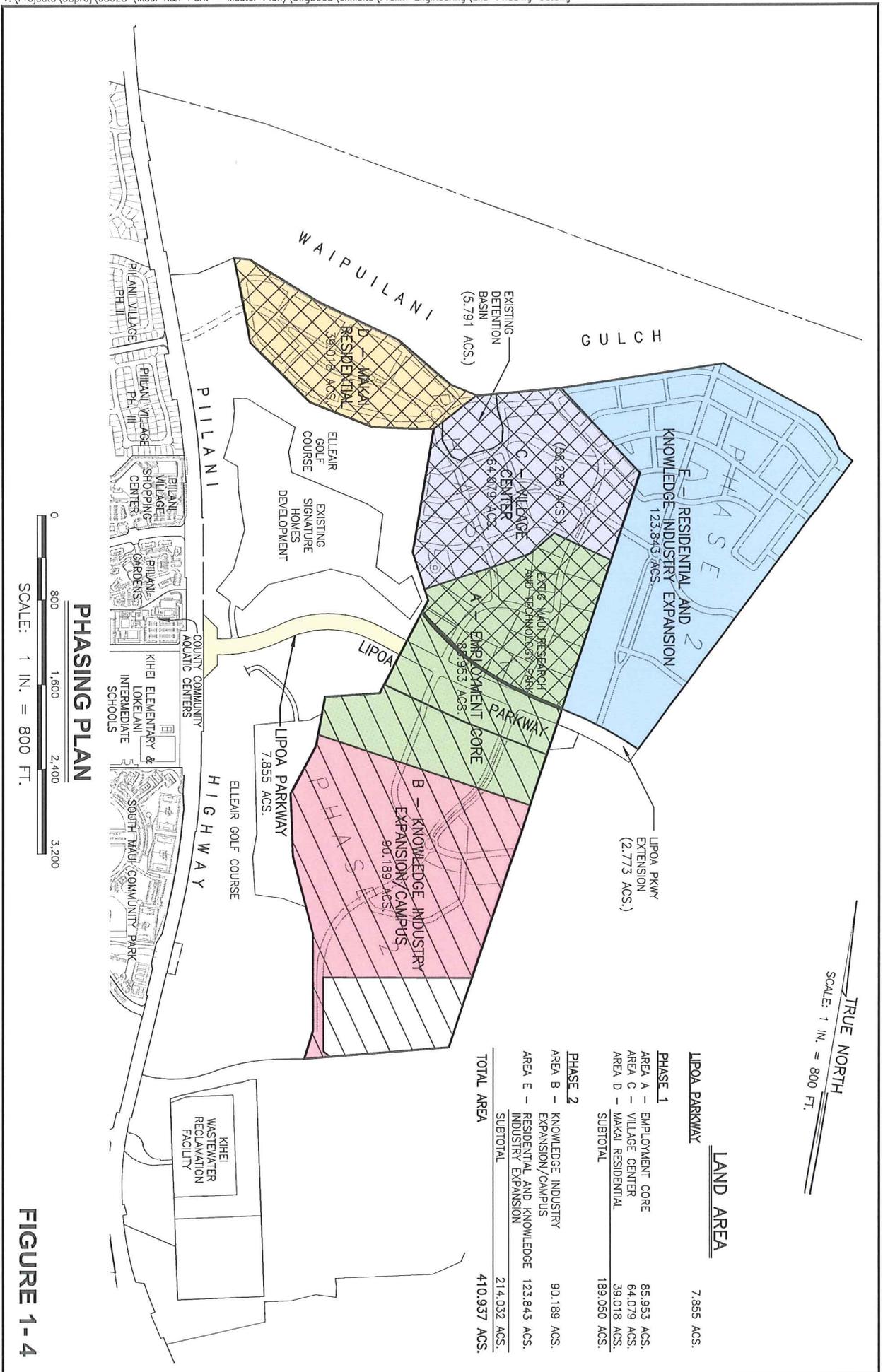
PHASING PLAN

FIGURE 1-3

TRUE NORTH
 SCALE: 1 IN. = 800 FT.

LAND AREA

| | | |
|---|--|---------------------|
| LIPOA PARKWAY | | 7,855 ACS. |
| PHASE 1 | | |
| AREA A - EMPLOYMENT CORE | | 85,953 ACS. |
| AREA C - VILLAGE CENTER | | 64,079 ACS. |
| AREA D - MAKAI RESIDENTIAL | | 39,018 ACS. |
| SUBTOTAL | | 189,050 ACS. |
| PHASE 2 | | |
| AREA B - KNOWLEDGE INDUSTRY EXPANSION/CAMPUS | | 90,189 ACS. |
| AREA E - RESIDENTIAL AND KNOWLEDGE INDUSTRY EXPANSION | | 123,843 ACS. |
| SUBTOTAL | | 214,032 ACS. |
| TOTAL AREA | | 410,937 ACS. |



PHASING PLAN

0 800 1,600 2,400 3,200

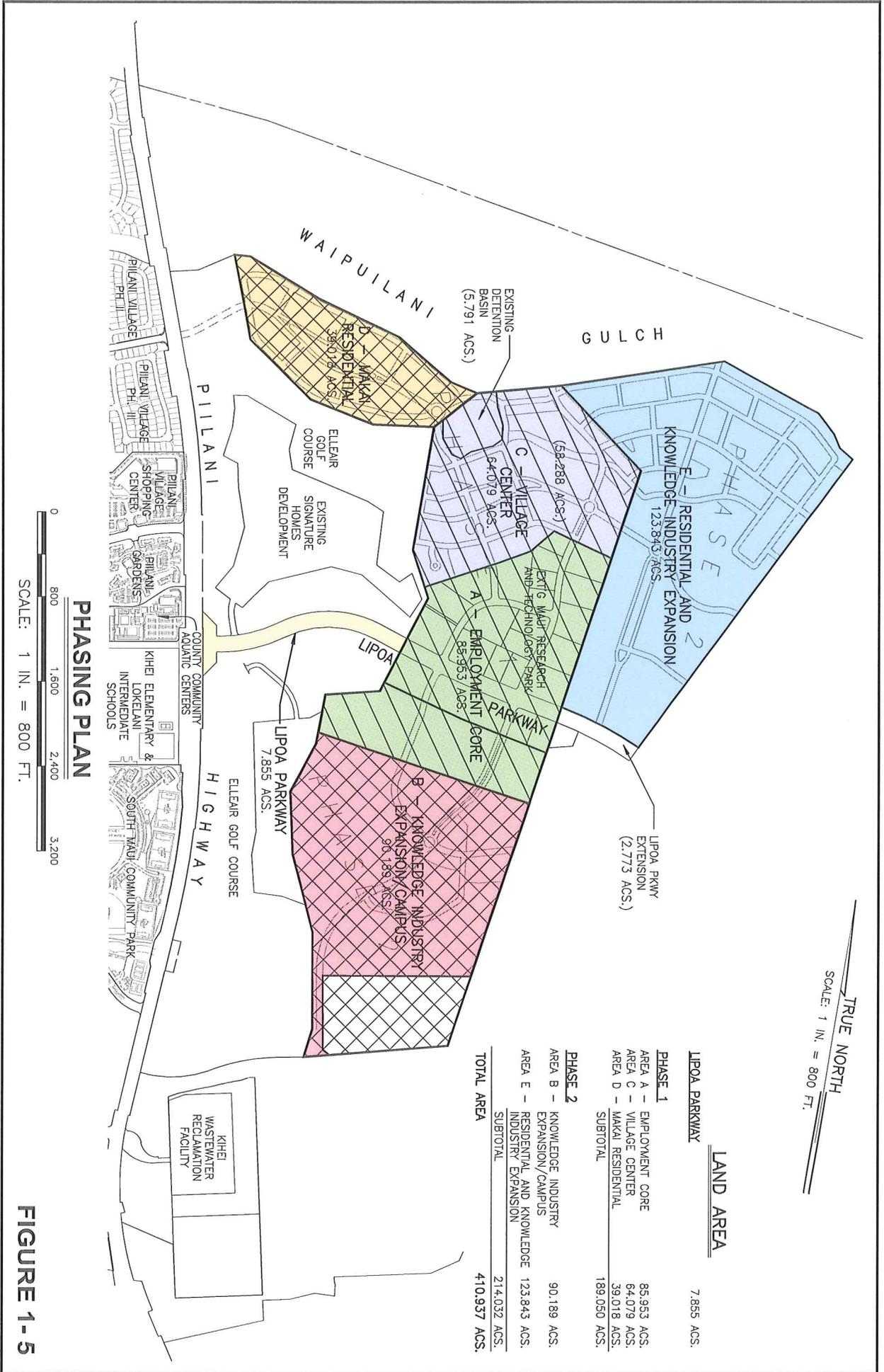
SCALE: 1 IN. = 800 FT.

TRUE NORTH

SCALE: 1 IN. = 800 FT.

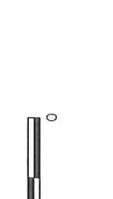
| LAND AREA | |
|---|---------------------|
| LIPOA PARKWAY | 7,855 ACS. |
| PHASE 1 | |
| AREA A - EMPLOYMENT CORE | 89,953 ACS. |
| AREA C - VILLAGE CENTER | 64,079 ACS. |
| AREA D - MAAKAN RESIDENTIAL | 39,018 ACS. |
| SUBTOTAL | 189,050 ACS. |
| PHASE 2 | |
| AREA B - KNOWLEDGE INDUSTRY EXPANSION/CAMPUS | 90,189 ACS. |
| AREA E - RESIDENTIAL AND KNOWLEDGE INDUSTRY EXPANSION | 123,843 ACS. |
| SUBTOTAL | 214,032 ACS. |
| TOTAL AREA | 410,937 ACS. |

FIGURE 1-4



PHASING PLAN

SCALE: 1 IN. = 800 FT.



LAND AREA

| | |
|---|---------------------|
| LIPOA PARKWAY | 7,855 ACS. |
| PHASE 1 | |
| AREA A - EMPLOYMENT CORE | 85,953 ACS. |
| AREA C - VILLAGE CENTER | 64,079 ACS. |
| AREA D - MAKAI RESIDENTIAL | 39,018 ACS. |
| SUBTOTAL | 189,050 ACS. |
| PHASE 2 | |
| AREA B - KNOWLEDGE INDUSTRY EXPANSION/CAMPUS | 90,189 ACS. |
| AREA E - RESIDENTIAL AND KNOWLEDGE INDUSTRY EXPANSION | 123,843 ACS. |
| SUBTOTAL | 214,032 ACS. |
| TOTAL AREA | 410,937 ACS. |

TRUE NORTH
SCALE: 1 IN. = 800 FT.

FIGURE 1-5

**CHECKLIST OF PLANTS OBSERVED AT MAUI RESEARCH AND TECHNOLOGY PARK (MRTP)
FEBRUARY 23 and MARCH 31, 2011**

Plant names are arranged alphabetically by family and then by species into each of two groups: Monocots and Dicots. The taxonomy and nomenclature of the flowering plants are in accordance with Wagner et al. (1999), Wagner and Herbst (1999), and Staples and Herbst (2005). Recent name changes are those recorded in the Hawaii Biological Survey series (Evenhuis and Eldredge, eds., 1999-2002). For each species, the following information is provided: scientific name with author citation, common English and/or Hawaiian name(s), when known; and biogeographic status.

KEY to biogeographic status:

I = indigenous = native to the Hawaiian Islands and elsewhere;

X = introduced or alien = all those plants brought to the Hawaiian Islands by humans, intentionally or accidentally, after Western contact, that is Cook's arrival in the islands in 1778

KEY to relative site abundance:

A = Abundant = forming a major part of the vegetation within the project area;

C = Common = widely scattered throughout the area or locally abundant within a portion of it;

U = Uncommon = scattered sparsely throughout the area or occurring in a few small patches;

R = Rare = only a few isolated individuals within the project area

KEY to surveys:

Hobby = Robert Hobby (October 2008)

SWCA = SWCA, this survey (February 2011)

| Scientific Name | Common Name(s) | Status | 2011 Relative Site Abundance | Source Survey |
|--|----------------------|--------|------------------------------|----------------------|
| Monocots | | | | |
| POACEAE | | | | |
| <i>Cenchrus ciliaris</i> L. | buffelgrass | X | A A | Hobby SWCA |
| <i>Chloris barbata</i> Sw. | swollen finger grass | X | C C | Hobby SWCA |
| <i>Cynodon dactylon</i> (L.) Pers. | Bermuda grass | X | C | SWCA |
| <i>Eragrostis pectinacea</i> (Michx.) Nees | Carolina love grass | X | C C | Hobby SWCA |

| Scientific Name | Common Name(s) | Status | 2011 Relative Site Abundance | Source Survey |
|--|-----------------------------|--------|------------------------------|---------------|
| Dicots | | | | |
| AMARANTHACEAE | | | | |
| <i>Alternanthera pungens</i> Kunth | khaki weed | X | R | SWCA |
| <i>Amaranthus spinosus</i> L. | spiny amaranth, pakai kukū | X | U U | Hobby SWCA |
| <i>Amaranthus hybridus</i> subsp. <i>hybridus</i> | green amaranth | X | R | SWCA |
| ASTERACEAE | | | | |
| <i>Ageratum conyzoides</i> L. | billygoat weed, maile | X | R | SWCA |
| <i>Verbesina encelioides</i> (Cav.) Benth. & Hook. | golden crown-beard | X | R R | Hobby SWCA |
| <i>Zinnia peruviana</i> (L.) L. | pua pihī | X | R | SWCA |
| BORAGINACEAE | | | | |
| <i>Cordia subcordata</i> Lam. | kou | I | R | SWCA |
| <i>Heliotropium curassavicum</i> L. | kīpūkai, seaside heliotrope | I | R | SWCA |
| CONVOLVULACEAE | | | | |
| <i>Ipomoea obscura</i> (L.) Ker Gawl. | morning glory | X | R | SWCA |
| <i>Merremia aegyptia</i> (L.) Urb. | hairy merremia | X | R | SWCA |
| CUCURBITACEAE | | | | |
| <i>Lagenaria siceraria</i> (Molina) Standl. | bottle gourd | X | R | SWCA |
| EUPHORBIACEAE | | | | |
| <i>Chamaesyce hypericifolia</i> (L.) Millsp. | graceful spurge | X | - | Hobby |

| Scientific Name | Common Name(s) | Status | 2011 Relative Site Abundance | Source Survey |
|--|--|--------|------------------------------|---------------|
| <i>Euphorbia cyathophora</i> J.A.Murray | Mexican fire plant, wild poinsettia | X | R | SWCA |
| <i>Ricinus communis</i> L. | castor bean | X | R | SWCA |
| FABACEAE | | | | |
| <i>Acacia farnesiana</i> (L.) Willd. | klu | X | R R | Hobby SWCA |
| <i>Desmanthus pernambucans</i> (L.) Thellung | slender mimosa | X | - | Hobby |
| <i>Leucaena leucocephala</i> (Lam.) de Wit | koa haole | X | R R | Hobby SWCA |
| <i>Prosopis pallida</i> (Humb. & Bonpl. ex Willd.) Kunth | kiawe | X | A A | Hobby SWCA |
| <i>Samanea saman</i> (Jacq.) Merr. | monkey pod, rain tree, 'ohai, pū 'ohai | X | R | SWCA |
| LAMIACEAE | | | | |
| <i>Leonotis nepetifolia</i> (L.) R. Br. | lion's ear | X | R | SWCA |
| MALVACEAE | | | | |
| <i>Abutilon grandifolium</i> (Willd.) Sweet | hairy abutilon, ma'o | X | R | SWCA |
| <i>Malva parviflora</i> L. | cheese weed | X | C | SWCA |
| <i>Sida fallax</i> Walp. | 'ilima | I | R U | Hobby SWCA |
| MORACEAE | | | | |
| <i>Ficus microcarpa</i> L.f. | Chinese banyan | X | R | SWCA |
| SOLANACEAE | | | | |
| <i>Nicandra physalodes</i> (L.) Gaertn. | apple of Peru | X | R | SWCA |
| STERCULIACEAE | | | | |

| Scientific Name | Common Name(s) | Status | 2011 Relative Site Abundance | Source Survey |
|---------------------------------|----------------|--------|------------------------------|----------------------|
| <i>Waltheria indica</i> L. | 'uhaloa | I? | U U | Hobby SWCA |
| VERBENACEAE | | | | |
| <i>Citharexylum spinosum</i> L. | fiddlewood | X | R | SWCA |

Literature Cited:

- Hobby, R.W. 2008. Botanical and fauna surveys for the Maui research and technology park proposed urban zoning expansion project, Kihei. Report prepared for Pacific Rim Land, Inc.
- Evenhuis, N. L., and L. G. Eldredge, eds., 1999-2002. Records of the Hawaii Biological Survey. Bishop Museum Occasional Papers No. 58-70.
- Staples, G. W., and D. R. Herbst. 2005. *Garden Flora. Plants cultivated in the Hawaiian Islands and other tropical places*. Honolulu: Bishop Museum Press.
- Wagner, W. L., D. R. Herbst, and S. H. Sohmer. 1999. Manual of the flowering plants of Hawaii. Honolulu: University of Hawaii Press and Bishop Museum Press.
- Wagner, W. L., and D. R. Herbst. 1999. Supplement to the Manual of the flowering plants of Hawaii, pp. 1855-1918. In: Wagner, W. L., D. R. Herbst, and S. H. Sohmer. 1999. *Manual of the flowering plants of Hawaii*. Honolulu: University of Hawaii Press and Bishop Museum Press.

ALAN M. ARAKAWA
Mayor

WILLIAM R. SPENCE
Director

MICHELE CHOUTEAU McLEAN
Deputy Director



RECEIVED

AUG 14 2012

CHRIS HART & PARTNERS, INC.
Landscape Architecture and Planning

cc: Brent
081132

COUNTY OF MAUI
DEPARTMENT OF PLANNING

August 13, 2012

Mr. Daniel E. Orodener, Executive Director
State of Hawaii Land Use Commission
P.O. Box 2359
Honolulu, Hawaii 96804-2359

Dear Mr. Orodener:

SUBJECT: DRAFT ENVIRONMENTAL IMPACT STATEMENT (EIS) FOR THE PROPOSED LAND USE DISTRICT BOUNDARY AMENDMENT (DBA) FOR THE MAUI RESEARCH & TECHNOLOGY PARK MASTER PLAN, AT KIHEI, MAUI, HAWAII; TMK(S): (2) 2-2-024:001-009; 014-018; 031; 032; 034; 036-046; AND (2) 2-2-002:054 (POR.) (EAC 2012/0013)

The Department of Planning (Department) is in receipt of the above-referenced document for the proposed petition to amend the land use boundary to effect a district reclassification of approximately 256.243 acres of land situated at Kihei, Maui, Hawaii, from the Agricultural District to the Urban District for the Maui Research & Technology Park. The Department understands the proposed action includes the following:

- The Applicant is Maui R&T Partners, LLC;
- The Applicant is requesting a Land Use DBA for a reclassification of approximately 256.243 acres of land from the Agricultural District to the Urban District and the land is identified by Tax Map Key (TMK) Parcel Nos. (2) 2-2-024:016 and 017 and a portion of (2) 2-2-002:054. Additionally, the project will require amendments to the conditions placed upon currently urbanized lands, comprising approximately 157.76 acres;
- The Approving Agency is the Land Use Commission of the State of Hawaii;
- The proposed project will require an amendment to the Kihei-Makena Community Plan (CPA) from Project District 6, Public/Quasi Public, and Agricultural to a District that better aligns with the Maui Research & Technology Park Master Plan strategic vision and changes of Maui County Code (MCC), Title 19.33 "Kihei Research & Technology Park District." The CPA will require approval by the Maui County Council;
- The proposed project will require a Maui County Change in Zoning (CIZ) in order to bring the entire Park site into the Research and Technology Park District, whereas portions of the Park are currently zoned Agricultural. The CIZ will require approval by the Maui County Council; and

- The CPA and anticipated "off-site" infrastructure work affecting State and County "rights-of-way" are "triggers" for the preparation of an EIS.

Based on the foregoing, the Department provides the following comments of the Draft EIS:

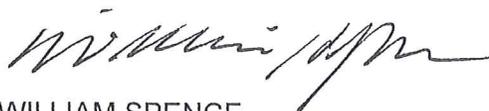
1. The Department concurs that the Petition to amend the land use district boundary of certain lands consisting of 256.243 acres from the Agricultural District to the Urban District is related to TMK Nos. (2) 2-2-024:016, and 017, and (2) 2-2-002:054 (POR.);
2. The Department concurs that the proposed CPA and anticipated use of State and County lands are "triggers" that require compliance with Chapter 343, Hawaii Revised Statutes (HRS);
3. The Department concurs that the State Land Use Commission shall be the Approving Agency for the EIS pursuant to Chapter 343, HRS;
4. On June 23, 2010, the Applicant filed a petition with the State Land Use Commission for a DBA from Agriculture to Urban for certain lands as identified;
5. The Applicant has filed a Consolidated Application for a CPA and CIZ for the Project which shall be reviewed by the Maui Planning Commission and Maui County Council;
6. The Draft EIS that looks at the Maui Research & Technology Park Master Plan Update as a whole shall include Transportation Demand Management Measures along with a Traffic Impact and Analysis Report (TIAR) for the project which shall seek to reduce or mitigate traffic impacts. Applicable and relevant updates to these reports should be provided on a timely basis at project milestones as changes in the timing and project scope may occur over the duration of the project;
7. The Draft EIS that looks at the Maui Research & Technology Park Master Plan Update as a whole shall state how the project will provide affordable housing in accordance with the County's Workforce Housing Policy as applicable and require that the Applicant coordinate with the Department of Housing and Human Concerns an appropriate affordable housing program per Maui County requirements;
8. The Department strongly recommends that this project as a whole be reviewed by the Maui County Urban Design Review Board (UDRB) to allow for a discussion of project design as it will include residential, civic, and commercial mixed-use components, along with areas of open space and parks. Review by

the UDRB may involve multiple meetings due to the scope and complexity of this project;

9. The County of Maui is currently reviewing the Draft Maui Island Plan that proposes a Directed Growth Strategy to establish urban growth boundaries and the land area under review for this Petition for a DBA from the Agricultural District to the Urban District is within the proposed urban growth boundaries of the Draft Maui Island Plan. Please include a map of the Draft Maui Island Plan Kihei-Makena growth area boundary and include the location of the Maui Research & Technology Park site; and
10. The Department concurs that the location and timing of a Kihei-Mauka North-South Collector Road is an unresolved issue as the schedule for the development of this roadway is uncertain at this time. In order to create an interconnected Kihei-Mauka transportation network in advance of the potential development of a Kihei-Mauka Collector Road, the Department strongly recommends that the Applicant consider designating and designing Ninau Street as a "complete street" with on street dedicated bicycle lanes, pedestrian facilities, median and through travel lanes, that would connect with North-South roadways of adjacent future development mauka of Pi'ilani Highway.

Thank you for the opportunity to comment. Should you require further clarification, please contact Staff Planner Kurt Wollenhaupt at kurt.wollenhaupt@mauicounty.gov or at (808) 270-1789; Staff Planner Kathleen Kern of the Long Range Division at kathleen.kern@mauicounty.gov or at (808) 270-7841; or Staff Planner Paul Critchlow of the Zoning Administration and Enforcement Division at paul.critchlow@mauicounty.gov or at (808) 270-5795.

Sincerely,



WILLIAM SPENCE
Planning Director

- xc: Clayton I. Yoshida, AICP, Planning Program Administrator (PDF)
Aaron H. Shinmoto, PE, Planning Program Administrator (PDF)
John F. Summers, Planning Program Administrator (PDF)
Kathleen Kern, Staff Planner (PDF)
Paul B. Critchlow, Staff Planner (PDF)
Kurt F. Wollenhaupt, Staff Planner (PDF)
Brett Davis, Chris Hart & Partners, Inc.
Project File
General File

WRS:KFW:cr

K:\WP_DOCS\PLANNING\EAC\2012\0013_MauiResearchPark\FinalComment.DOC



**CHRIS
HART**
& PARTNERS, INC.

Landscape Architecture
City & Regional Planning

December 7, 2012

Mr. William Spence, Director
County of Maui, Department of Planning
250 South High Street
Wailuku, HI 96793

Dear Mr. Spence,

RE: Comments on the Draft Environmental Impact Statement for the Proposed Maui Research and Technology Park (MRTP) Master Plan Update, located in Kihei, Maui, Hawaii at TMK's: (2) 2-2-024:1-9,14-18,31,32, 34, 36-46 and (2) 2-2-002:054 (por.)

Thank you for your letter of August 13, 2012; I am pleased to provide the following responses to your numerated comments.

1-5.No Comment to respond to.

6. The Draft EIS includes a Traffic Impact and Analysis Report (TIAR) that analyzes the potential impacts of the proposed development and provides recommendations to reduce or mitigate traffic impacts. The TIAR included Transportation Demand Management measures. The applicant's Traffic Engineer will continue to coordinate with the Department of Public Works and State Department of Transportation on the roadway infrastructure development. The TIAR will be updated for the FEIS.

7. The MRTP Master Plan update includes on-site affordable housing in accordance with the County's Workforce Housing Policy. The Applicant will continue to coordinate with the Department of Housing and Human Concerns on an appropriate affordable housing program per Maui County requirements.

8. As a reminder, the Master Plan Update was presented to the Urban Design Review Board (UDRB) on November 16, 2010 by Peter Calthorpe and the feedback regarding the Master Plan update was positive. If required by the Maui County Change in Zoning or Community Plan Amendment process, the applicant will be prepared to present the project again to the UDRB for comment.

9. The DEIS includes a map of the Draft Maui Island Plan Kihei-Makena growth area boundary including the location of the MRTP. See: Figure No. 25 of the FEIS document.

10. The Applicant is in agreement with the Department on creating an interconnected Kihei-Mauka Collector Road. The Applicant has redesigned North and South Ninau Streets as a complete street. The majority of Ninau will become a 92-foot wide "North-South Greenway" to serve as the principal north-south route through the MRTP. This North-South Greenway (Figure 37b of the FEIS) will feature a divided two-lane roadway with 6-foot bicycle lane and curbside parking, 7-foot wide walkways widely separated from the moving-vehicle lanes provide a safe and inviting route for pedestrian travel.

Further south, in the Employment/Campus District, South Ninau Street will include a raised bicycle lane. This configuration raises the bicycle lane and adjacent parking lane above the level of the driving lane. (Figure 37b of the FEIS) will be a 72-foot-right-of-way, two lanes with a 10-foot travel lane and a 6-foot raised bicycle lane and raised 8-foot wide curbside parking. 6-foot wide concrete sidewalks will be provided on both sides of the street.

Thank you again, for providing us with your response. Please feel free to call Ms. Jennifer Maydan, AICP or Mr. Brett Davis at (808) 242-1955 should you have any questions.

Sincerely yours,



Jordan Hart
Vice President

ENCLOSURE

CC. Mr. Steve Perkins, Pacific Rim Land, Inc.
Mr. Kurt Wollenhaupt, Staff Planner
Ms. Kathleen Kern, Staff Planner
Mr. Paul Critchlow, Staff Planner
Project File 08-132

NEIL ABERCROMBIE
GOVERNOR OF HAWAII



WILLIAM J. AILA, JR.
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

RECEIVED

AUG 16 2012

CHRIS HART & PARTNERS, INC.
Landscape Architects and Planning

August 13, 2012

Maui R&T Partners, LLC
Attention: Mr. Steve Perkins, Project Manager
1300 North Holocono, Suite 201
Kihei, Hawaii 96753

Chris Hart & Partners, Inc.
Attention: Mr. Brett Davis
115 North Market Street
Wailuku, Hawaii 96793

Dear Mr. Perkins and Mr. Davis:

SUBJECT: Draft Environmental Impact Statement (EIS) for the Proposed Maui
Research and Technology Park Master Plan Update

Thank you for the opportunity to review and comment on the subject matter. The Department of Land and Natural Resources' (DLNR) Land Division distributed or made available a copy of your report pertaining to the subject matter to DLNR Divisions for their review and comments.

At this time, enclosed are comments from the (a) Division of State Parks, (b) Engineering Division, and (c) Division of Aquatic Resources on the subject matter. Should you have any questions, please feel free to call Lydia Morikawa at 587-0410. Thank you.

Sincerely,

A handwritten signature in black ink, appearing to read "Russell Y. Tsuji".

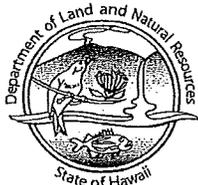
Russell Y. Tsuji
Land Administrator

Enclosure(s)
cc: Central Files

NEIL ABERCROMBIE
GOVERNOR OF HAWAII



WILLIAM J. AILA, JR.
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

July 6, 2012

MEMORANDUM

TO:

DLNR Agencies:

- Div. of Aquatic Resources
- Div. of Boating & Ocean Recreation
- Engineering Division
- Div. of Forestry & Wildlife
- Div. of State Parks
- Commission on Water Resource Management
- Office of Conservation & Coastal Lands
- Land Division – Maui District
- Historic Preservation

FROM:

Russell Y. Tsuji, Land Administrator

SUBJECT:

Draft Environmental Impact Statement (EIS) for the Proposed Maui Research and Technology Park Master Plan Update

LOCATION:

Makawao District, Island of Maui; TMK: (2) 2-2-24:001-009, 014-018, 031, 032, 034, 036-046 & 2-2-002:054 (por.)

APPLICANT:

Maui Research Partners, LLC

RECEIVED
 LAND DIVISION
 2012 JUL 23 A 11: 27
 DEPT. OF LAND &
 NATURAL RESOURCES
 STATE OF HAWAII
 12 JUL 03 PM 01:22 ENGINEERING

Transmitted for your review and comment on the above referenced document. We would appreciate your comments on this document. Please submit any comments by August 10, 2012.

Only one (1) copy of the document is available for your review in Land Division office, Room 220.

If no response is received by this date, we will assume your agency has no comments. If you have any questions about this request, please contact Lydia Morikawa at 587-0410. Thank you.

Attachments

- We have no objections.
- We have no comments.
- Comments are attached.

Signed:

Print Name: CARTY CHANG CHIEF ENGINEER

Date: 7/19/12

cc: Central Files

DEPARTMENT OF LAND AND NATURAL RESOURCES
ENGINEERING DIVISION

LD/LydiaMorikawa

RE: DEISMauiresearch&TechMPUpdate
Maui.579

- () We confirm that the project site, according to the Flood Insurance Rate Map (FIRM), is located in Flood Zone ____.
- () Please take note that the project site, according to the Flood Insurance Rate Map (FIRM), is located in Zone ____.
- () Please note that the correct Flood Zone Designation for the project site according to the Flood Insurance Rate Map (FIRM) is ____.
- () Please note that the project must comply with the rules and regulations of the National Flood Insurance Program (NFIP) presented in Title 44 of the Code of Federal Regulations (44CFR), whenever development within a Special Flood Hazard Area is undertaken. If there are any questions, please contact the State NFIP Coordinator, Ms. Carol Tyau-Beam, of the Department of Land and Natural Resources, Engineering Division at (808) 587-0267.

Please be advised that 44CFR indicates the minimum standards set forth by the NFIP. Your Community's local flood ordinance may prove to be more restrictive and thus take precedence over the minimum NFIP standards. If there are questions regarding the local flood ordinances, please contact the applicable County NFIP Coordinators below:

- () Mr. Mario Siu Li at (808) 768-8098 or Ms. Ardis Shaw-Kim at (808) 768-8296 of the City and County of Honolulu, Department of Planning and Permitting.
 - () Mr. Frank DeMarco at (808) 961-8042 of the County of Hawaii, Department of Public Works.
 - () Mr. Francis Cerizo at (808) 270-7771 of the County of Maui, Department of Planning.
 - () Ms. Wynne Ushigome at (808) 241-4890 of the County of Kauai, Department of Public Works.
- () The applicant should include water demands and infrastructure required to meet project needs. Please note that projects within State lands requiring water service from the Honolulu Board of Water Supply system will be required to pay a resource development charge, in addition to Water Facilities Charges for transmission and daily storage.
 - () The applicant should provide the water demands and calculations to the Engineering Division so it can be included in the State Water Projects Plan Update.
 - () Additional Comments: _____

(X) Other: Our previous comments dated October 12, 2010, which are attached in the Draft Environmental Impact Statement, still apply.

Should you have any questions, please call Ms. Suzie S. Agraan of the Planning Branch at 587-0258.

Signed: 
CARTY S. CHANG, CHIEF ENGINEER

Date: 7/19/12



Landscape Architecture
City & Regional Planning

August 27, 2012

Mr. Carty S. Chang, Chief Engineer
Department of Land and Natural Resources
Engineering Division
P.O. Box 621
Honolulu, HI 96809

Dear Mr. Chang,

RE: Comments on the Draft Environmental Impact Statement for the Proposed Maui Research and Technology Park Master Plan update, located in Kihei, Maui, Hawaii at TMK's: (2) 2-2-024:1-9,14-18,31,32, 34, 36-46 and (2) 2-2-002:054 (por.)

Thank you for your letter of July 19, 2012 indicating that the previous comments dated October 12, 2010, still apply.

Thank you again for letter. Please feel free to call me or Mr. Brett Davis at (808) 242-1955 should you have any questions.

Sincerely yours,

Christopher L. Hart, ASLA
President
Landscape Architect • Planner

CC. Mr. Steve Perkins, Pacific Rim Land, Inc.
DD. Mr. Russell Y. Tsuji, Land Administrator
Project File 08-132

NEIL ABERCROMBIE
GOVERNOR OF HAWAII



WILLIAM J. AILA, JR.
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

AW
SH



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

RECEIVED

July 6, 2012

JUL 20 2012

MEMORANDUM

Div. of Aquatic Resources

TO:

DLNR Agencies:

- Div. of Aquatic Resources
- Div. of Boating & Ocean Recreation
- Engineering Division
- Div. of Forestry & Wildlife
- Div. of State Parks
- Commission on Water Resource Management
- Office of Conservation & Coastal Lands
- Land Division - Maui District
- Historic Preservation



RECEIVED
LAND DIVISION
2012 AUG -2 A 10:18
DEPT. OF LAND & NATURAL RESOURCES
STATE OF HAWAII

FROM:

Russell Y. Tsuji, Land Administrator

SUBJECT:

Draft Environmental Impact Statement (EIS) for the Proposed Maui Research and Technology Park Master Plan Update

LOCATION:

Makawao District, Island of Maui; TMK: (2) 2-2-24:001-009, 014-018, 031, 032, 034, 036-046 & 2-2-002:054 (por.)

APPLICANT:

Maui Research Partners, LLC

Transmitted for your review and comment on the above referenced document. We would appreciate your comments on this document. Please submit any comments by August 10, 2012.

Only one (1) copy of the document is available for your review in Land Division office, Room 220.

If no response is received by this date, we will assume your agency has no comments. If you have any questions about this request, please contact Lydia Morikawa at 587-0410. Thank you.

Attachments

- We have no objections.
- We have no comments.
- Comments are attached.

Signed:

Francis Oishi

Print Name:

Francis Oishi

Date:

7/31/2012

cc: Central Files

DIVISION OF AQUATIC RESOURCES - MAUI
DEPARTMENT OF LAND & NATURAL RESOURCES
130 Mahalanani Street
Wailuku, Hawai'i 96793
July 31, 2012

To: Lydla Morikawa, Land
From:  Skippy Hau, Aquatic Biologist
Subject: Maui Research and Technology Park Master Plan Update
(DAR 4387) (Due Date: August 10, 2012)

I have no objections for the Community Plan Amendment and Change in Zoning.

The proposed drainage plan appears to address increased drainage from the Maui Technology Park for a 50-year storm. Will excessive storm runoff be directed to off-site areas such as the Waipulanui Gulch?

The proposal appears to include development of the High School and expansion of the Pillani Highway.



**CHRIS
HART**
& PARTNERS, INC.

Landscape Architecture
City & Regional Planning

August 27, 2012

Francis Oishi
Department of Land and Natural Resources
Division of Aquatic Resources
P.O. Box 621
Honolulu, HI 96809

Dear Francis Oishi:

RE: Comments on the Draft Environmental Impact Statement for the Proposed Maui Research and Technology Park Master Plan update, located in Kihei, Maui, Hawaii at TMK's: (2) 2-2-024:1-9,14-18,31,32, 34, 36-46 and (2) 2-2-002:054 (por.)

Thank you for your letter of July 1, 2012 indicating that the Division has no objections to the master plan update. In response to Mr. Skippy Hau's comments, Maui County's storm drainage rules specify that excess runoff from large rainfall events which surpass the required design storm -- a 50-year storm, in this case -- should be directed to an appropriate drainage channel using an overflow swale or emergency spillway for safety; therefore, during very large storm events, it may indeed prove necessary to direct some portion of the excess runoff into an off-site drainageway such as Waipuiani Gulch for safety.

The Master Plan update provides the opportunity for a school, but a school is not committed to the project as of today. Any roadway expansion work of Piilani highway would be coordinated and designed with the Department of Transportation.

Thank you again for letter. Please feel free to call me or Mr. Brett Davis at (808) 242-1955 should you have any questions.

Sincerely yours,

Christopher L. Hart, ASLA
President
Landscape Architect • Planner

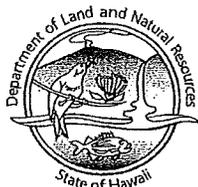
CC. Mr. Steve Perkins, Pacific Rim Land, Inc.
Mr. Russell Y. Tsuji, Land Administrator
Project File 08-132

55259

NEIL ABERCROMBIE
GOVERNOR OF HAWAII



WILLIAM J. AILA, JR.
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
AND WATER RESOURCE MANAGEMENT
STATE PARKS DIV



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

'12 JUL -9 110 :26

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

DEPT OF LAND &
NATURAL RESOURCES

July 6, 2012

MEMORANDUM

TO: **DLNR Agencies:**
X Div. of Aquatic Resources
 Div. of Boating & Ocean Recreation
X Engineering Division
X Div. of Forestry & Wildlife
X Div. of State Parks
X Commission on Water Resource Management
 Office of Conservation & Coastal Lands
X Land Division – Maui District
X Historic Preservation

RECEIVED
LAND DIVISION
2012 JUL 12 P 2:39
DEPT. OF LAND &
NATURAL RESOURCES
STATE OF HAWAII

FROM: Russell Y. Tsuji, Land Administrator
SUBJECT: Draft Environmental Impact Statement (EIS) for the Proposed Maui Research and Technology Park Master Plan Update
LOCATION: Makawao District, Island of Maui; TMK: (2) 2-2-24:001-009, 014-018, 031, 032, 034, 036-046 & 2-2-002:054 (por.)
APPLICANT: Maui Research Partners, LLC

Transmitted for your review and comment on the above referenced document. We would appreciate your comments on this document. Please submit any comments by August 10, 2012.

Only one (1) copy of the document is available for your review in Land Division office, Room 220.

If no response is received by this date, we will assume your agency has no comments. If you have any questions about this request, please contact Lydia Morikawa at 587-0410. Thank you.

Attachments

- We have no objections.
- We have no comments.
- Comments are attached.

Signed:
Print Name: Daniel S. Quinn
Date: 7/10/12

cc: Central Files



Landscape Architecture
City & Regional Planning

August 27, 2012

Daniel S. Quina
Department of Land and Natural Resources
Division of State Parks
P.O. Box 621
Honolulu, HI 96804

Dear Mr. Quina:

RE: Comments on the Draft Environmental Impact Statement for the Proposed Maui Research and Technology Park Master Plan update, located in Kihei, Maui, Hawaii at TMK's: (2) 2-2-024:1-9,14-18,31,32, 34, 36-46 and (2) 2-2-002:054 (por.)

Thank you for your letter of July 10, 2012 indicating that the Division of State Parks has no comment.

Thank you again for letter. Please feel free to call me or Mr. Brett Davis at (808) 242-1955 should you have any questions.

Sincerely yours,

Christopher L. Hart, ASLA
President
Landscape Architect • Planner

CC. Mr. Steve Perkins, Pacific Rim Land, Inc.
Mr. Russell Y. Tsuji, Land Administrator
Project File 08-132

ALAN M. ARAKAWA
Mayor



DAVID TAYLOR, P.E.
Director

PAUL J. MEYER
Deputy Director

DEPARTMENT OF WATER SUPPLY
COUNTY OF MAUI
200 SOUTH HIGH STREET
WAILUKU, MAUI, HAWAII 96793-2155
www.mauiwater.org

August 15, 2012

Mr. Brett Davis
Chris Hart and Partners
115 N. Market Street
Wailuku, Hawaii 96793

Re: I.D.: Draft Environmental Impact Statement (DEIS)
TMKs: (2) 2-2-24:01-07; (2) 2-2-24:08; (2) 2-2-24:09; (2) 2-2-24:14-18; (2) 2-2-24:31; (2) 2-2-24:32; (2) 2-2-024:34; (2) 2-2-24:36 - 46; (2) 2-2-002:054 (portion)
Project Name: Maui Research and Technology Park Master Plan Update DEIS

Dear Mr. Davis:

Thank you for the opportunity to comment on this DEIS. Please find attached our comment letter dated November 23, 2010 for Early Consultation for the Preparation of a Draft EIS. We have a few additional comments on this next phase in the EIS process:

Source Availability and Impact on Kamole Aquifer

The Department of Water Supply's current infrastructure can not meet the anticipated demand of 1.1 MGD. New source will be required to meet cumulative demand. The EIS should discuss the following issues:

1. Pump installation permits in the underlying Kamole Aquifer far exceed the sustainable yield set by the Commission on Water Resource Management (CWRM). If overall pumpage exceeds sustainable yield, the CWRM may designate the aquifer and restrict issuance of well construction permits and water use.
2. Alternative source options should be explored, such as contributing to source development in North Waihee Aquifer or other area satisfactory to the Department.

Surrounding Water Users

Brackish water desalinization is recommended as a final candidate strategy in the Draft WUDP. The EIS should discuss how the implementation of the proposed project might

"By Water All Things Find Life"

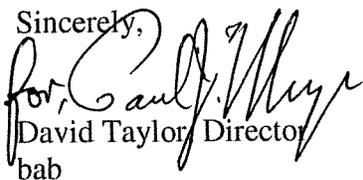
Mr. Brett Davis
Page 2

impact the potential for brackish water desalinization in the area, for: 1) present users; 2) future users; 3) public uses; and 4) private uses?

Alternative 1 Offsite Brackish Wells is within approximately 1,500 feet of existing Maui Highlands wells (Appendix A of Appendix J, Figure 3-2a). Could the proposed wells have the potential to affect the well water quality for existing or future Maui Highlands well use?

At full development, the northernmost field used for growing seed corn will be about 0.25 mile from the southeast corner of the Project (Agricultural Report, page 10). Does the RO discharge from source alternatives 1 and 2 have the potential to impact the existing agricultural operation's irrigation well? (Appendix F, Preliminary Engineering and Drainage Report, pages 3-5 to 3-6)

Should you have any questions, please contact Alex Buttaro at our Water Resources and Planning Division at 463-3103 or alex.buttaro@co.maui.hi.us.

Sincerely,

David Taylor, Director
bab

cc: Engineering Division

Attachment: DWS Early Consultation for the Preparation of a Draft EIS, November 23, 2010 letter.

CHARMAINE TAVARES
Mayor



JEFFREY K. ENG
Director

DEPARTMENT OF WATER SUPPLY

COUNTY OF MAUI

200 SOUTH HIGH STREET
WAILUKU, MAUI, HAWAII 96793-2155
www.mauiwater.org

November 23, 2010

Mr. Michael Summers
Chris Hart and Partners
115 North Market Street
Wailuku, HI 96793

Re: Maui Research and Technology Park Master Plan Update EIS Early Consultation
TMKs: (2) 2-2-024:1-9, 14-17, 31, 34; (2) 2-2-002:054 (por.)

Dear Mr. Summers:

Thank you for consulting with the Department of Water Supply (DWS) in the preparation of this Maui Research and Technology Park Master Plan Update EIS Early Consultation.

Source Availability and Consumption

The project area is served by the Central Maui System. Sources for this system are the Iao, Waihee and Kahului aquifers, Iao Tunnel and the Iao-Waikapu Ditch. Proposed source development projects include Waikapu South Well and the proposed Iao Surface Water Treatment Facility upgrade. The EA/EIS should identify sources and expected potable and non-potable demand. Based on system per-acre standards, the completed project's demand for 2,800,000 square feet of commercial space and 1,250 residential units would be 1,115,591 gpd. The project parcels are served by the following DWS system meters:

TMK (2) 2-2-024:001: one 1 ½-inch meter
TMK (2) 2-2-024:002: one 1 ½-inch meter and one ¾-inch meter
TMK (2) 2-2-024:004: one 1 ½-inch meter
TMK (2) 2-2-024:005: one 1-inch meter
TMK (2) 2-2-024:006: one 1 ½-inch meter
TMK (2) 2-2-024:007: one 2-inch meter
TMK (2) 2-2-024:008: one 1 ½-inch meter and two 2-inch meters
TMK (2) 2-2-024:015: one 1-inch meter

Subdivision of the project site would be subject to the County's availability policy, codified in Title 14 of the Maui County Code. The Department may delay issuance of meters until new sources are on line. The Department will not issue temporary construction meters for Central Maui projects.

"By Water All Things Find Life"

Because portions of the proposed project are within 100 feet of the county reclaimed water line, the project will be required to utilize reclaimed water for potential uses such as landscape irrigation and dust control during construction.

System Infrastructure

The project site is served by 16-inch and 12-inch lines that run along Lipoa Parkway. Twelve fire hydrants serve the project along Holopono and Nihau Streets and Lipoa Parkway. Required fire flow will be determined in the subdivision process.

A “Construction of a Storage Tank” agreement between the County of Maui Department of Water Supply and Maui R&T Partners dated January 21, 1992, has been superceded by a new agreement dated May 23, 2009. The new agreement states that a new tank must be constructed by May 23, 2020. The nearest tank (Piilani) does not feed the project due to insufficient elevation for fire and water service. The project is fed by a pressure regulating valve straight off the transmission main. DWS approved on site backflow preventors, tested by certified backflow preventor assembly testers, will be required as well.

Pollution Prevention

The project overlies the Kamaole aquifer. DWS strives to protect water resources by encouraging adoption of Best Management Practices (BMPs) designed to minimize infiltration and runoff. In addition to BMPs required by state and county rules and regulations and those previously mentioned, we recommend that the following mitigation measures be incorporated in the EIS and implemented.

1. Prevent cement products, oil, fuel and other toxic substances from falling or leaching into the water.
2. Properly and promptly dispose of all loosened and excavated soil and debris material from drainage structure work.
3. Retain ground cover until the last possible date.
4. Stabilize denuded areas by sodding or planting as soon as possible. Replanting should include soil amendments and temporary irrigation. Use high seeding rates to ensure rapid stand establishment.
5. Avoid fertilizers and biocides, or apply only during periods of low rainfall to minimize chemical run-off.
6. Keep run-off on site.

Conservation

Please see Attachment 1: *A Checklist of Water Conservation Ideas for Commercial Buildings* for potentially applicable conservation BMPs. We also recommend that the following conservation measures be incorporated in the EIS and implemented.

Use Non-potable Water: Reclaimed water is readily available from the Kihei Sewage Treatment Plant, or alternatively, brackish water could be used for dust control during construction. The subject parcels have a centrally located reclaimed water line that should be extended and utilized for irrigation. The applicant should install infrastructure necessary to utilize a future connection to the reclaimed water line.

Use Climate-adapted Plants: The project is located in the “Maui County Planting Plan” - Plant Zone 3 (see Attachment 2). Native plants adapted to the area conserve water and protect the watershed from degradation due to invasive alien species. Use native plants for all landscaping purposes to the extent feasible.

Prevent Over-Watering By Automated Systems: Provide rain-sensors on all automated irrigation controllers in common areas. Check and reset controllers at least once a month to reflect the monthly changes in evapo-transpiration rates at the site. As an alternative, provide the more automated soil-moisture sensors on controllers.

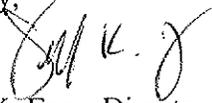
Eliminate Single-Pass Cooling: Single-pass, water-cooled systems should be eliminated per Maui County Code Subsection 14.21.20. Although prohibited by code, single-pass water cooling is still manufactured into some models of air conditioners, freezers, and commercial refrigerators.

Utilize Low-Flow Fixtures and Devices: Maui County Code Subsection 16.20A.680 requires the use of low-flow water fixtures and devices in faucets, showerheads, urinals, water closets, and hose bibs. Water conserving washing machines, ice-makers and other units are also available.

Maintain Fixtures to Prevent Leaks: A simple, regular program of repair and maintenance can prevent the loss of hundreds or even thousands of gallons of water a day.

Should you have any questions regarding system improvements for this project, please contact our engineering division at (808) 270-7835. For questions on water resources, please contact our Water Resources and Planning Division at (808) 244-8550.

Sincerely,



Jeffrey K. Eng, Director
bab

c: engineering division

Attachments:

1. *A Checklist of Water Conservation Ideas for Commercial Buildings*
2. *County of Maui Department of Water Supply, Saving Water in the Yard: What and How to Plant in Your Area*



**CHRIS
HART**
& PARTNERS, INC.

Landscape Architecture
City & Regional Planning

December 7, 2012

Mr. David Taylor, Director
County of Maui, Department of Water Supply
200 South High Street
Wailuku, HI 96793-2155

Dear Mr. Taylor,

RE: Comments on the Draft Environmental Impact Statement for the Proposed Maui Research and Technology Park Master Plan update, located in Kihei, Maui, Hawaii at TMK's: (2) 2-2-024:1-9,14-18,31,32, 34, 36-46 and (2) 2-2-002:054 (por.)

Thank you for your letter of August 15, 2012. I am pleased to provide the following responses:

Source Availability and Impact on Kamaole Aquifer

1. The Applicant's preference is that Maui County continues to provide drinking water for the entire MRTP Master Plan update area. In the event County drinking water is not available beyond the Employment Core area, the Applicant is prepared to construct a private water system. The Applicant will cooperate with the Commission on Water Resource Management (CWRM) to determine available water use in the underlying Kamaole Aquifer. It is our project team's understanding that the CWRM judges use of the aquifer relative to its sustainable yield by the 12-month moving average of pumpage, not by the cumulative capacity of pump installations permits; therefore the proposed use, together with ongoing and other foreseeable use of the aquifer, will not exceed its sustainable yield.

2. It is our project team's understanding that DWS has not previously offered participation in well development in the North Waihee Aquifer. The Applicant will continue to coordinate with the Department of Water Supply and is willing to discuss alternatives to private water system development using the Kamaole Aquifer.

Surrounding Water Users

Brackish water desalinization was the least desirable alternative considered by the project team. In the desalinization scenario, the proposed spacing between wells and pump capacities for these wells have been selected so as not to create a local overdraft or adversely impact existing wells and or future uses of groundwater from wells to the north or south. Therefore, in this scenario, present and future public and private users will not be adversely impacted.

However, in the mauka-to-makai corridor of groundwater flow from which the MRTP wells will draw, other future uses of this portion of the aquifer's sustainable supply would adversely impact the MRTP wells. It is anticipated that lands mauka of the MRTP may not be able to use the groundwater, and alternate sources may be necessary. It is an unavoidable impact of the desalinization alternative. The makai users in the residential areas below Piilani Highway will continue to use Maui County drinking water and will not be impacted.

The proposed *Alternative 1 Offsite Brackish Wells* will not affect the water quality of the existing Maui Highlands wells. The proposed MRTP well locations have been specifically selected as not to create a local overdraft or adversely impact existing wells or future uses of groundwater from wells to the north or south.

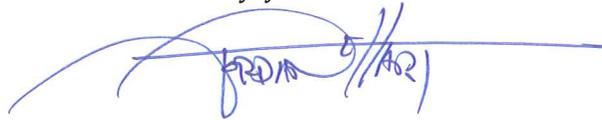
The disposal wells for all of the desalting alternatives would be designed to deliver the RO concentrate into the depth at which the density of the receiving groundwater is similar to that of the RO concentrate (a function of temperature and salinity). This will be done so that there will be no tendency for the injected concentrate to rise into the basal lens and adversely impact its water quality, therefore there is no anticipated impact to the seed corn growing field located to the southeast of the MRTP. For the brackish desalting alternatives, the disposal depths would be somewhere in the basal lens' transition zone. For the saline groundwater desalting alternative, disposal will be at greater depth in the

Mr. David Taylor, Director
MRTP Comment Response Letter
December 7, 2012
Page 3 of 3

saltwater zone. The concentrate will be hypersaline, meaning that it will be of greater density than the receiving groundwater with no tendency to rise up into the basal lens.

Thank you again for providing us with your comments. Please feel free to call Ms. Jennifer Maydan, AICP or Mr. Brett Davis at (808) 242-1955 should you have any questions.

Sincerely yours,



Jordan Hart
Vice President

ENCLOSURE

CC. Mr. Steve Perkins, Pacific Rim Land, Inc.
Mr. Tom Nance, Tom Nance Water Resource Engineering
Project File 08-132

ALAN M. ARAKAWA
Mayor



DAVID TAYLOR, P.E.
Director

PAUL J. MEYER
Deputy Director

DEPARTMENT OF WATER SUPPLY
COUNTY OF MAUI
200 SOUTH HIGH STREET
WAILUKU, MAUI, HAWAII 96793-2155
www.mauiwater.org

August 15, 2012

Mr. Brett Davis
Chris Hart and Partners
115 N. Market Street
Wailuku, Hawaii 96793

Re: I.D.: Draft Environmental Impact Statement (DEIS)
TMKs: (2) 2-2-24:01-07; (2) 2-2-24:08; (2) 2-2-24:09; (2) 2-2-24:14-18; (2) 2-2-24:31; (2) 2-2-24:32; (2) 2-2-024:34; (2) 2-2-24:36 - 46; (2) 2-2-002:054 (portion)
Project Name: Maui Research and Technology Park Master Plan Update DEIS

Dear Mr. Davis:

Thank you for the opportunity to comment on this DEIS. Please find attached our comment letter dated November 23, 2010 for Early Consultation for the Preparation of a Draft EIS. We have a few additional comments on this next phase in the EIS process:

Source Availability and Impact on Kamole Aquifer

The Department of Water Supply's current infrastructure can not meet the anticipated demand of 1.1 MGD. New source will be required to meet cumulative demand. The EIS should discuss the following issues:

1. Pump installation permits in the underlying Kamole Aquifer far exceed the sustainable yield set by the Commission on Water Resource Management (CWRM). If overall pumpage exceeds sustainable yield, the CWRM may designate the aquifer and restrict issuance of well construction permits and water use.
2. Alternative source options should be explored, such as contributing to source development in North Waihee Aquifer or other area satisfactory to the Department.

Surrounding Water Users

Brackish water desalinization is recommended as a final candidate strategy in the Draft WUDP. The EIS should discuss how the implementation of the proposed project might

"By Water All Things Find Life"

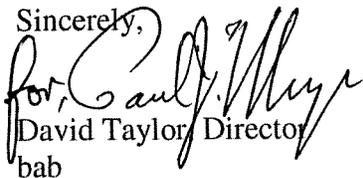
Mr. Brett Davis
Page 2

impact the potential for brackish water desalinization in the area, for: 1) present users; 2) future users; 3) public uses; and 4) private uses?

Alternative 1 Offsite Brackish Wells is within approximately 1,500 feet of existing Maui Highlands wells (Appendix A of Appendix J, Figure 3-2a). Could the proposed wells have the potential to affect the well water quality for existing or future Maui Highlands well use?

At full development, the northernmost field used for growing seed corn will be about 0.25 mile from the southeast corner of the Project (Agricultural Report, page 10). Does the RO discharge from source alternatives 1 and 2 have the potential to impact the existing agricultural operation's irrigation well? (Appendix F, Preliminary Engineering and Drainage Report, pages 3-5 to 3-6)

Should you have any questions, please contact Alex Buttaro at our Water Resources and Planning Division at 463-3103 or alex.buttaro@co.maui.hi.us.

Sincerely,

for, *David Taylor*, Director
bab

cc: Engineering Division

Attachment: DWS Early Consultation for the Preparation of a Draft EIS, November 23, 2010 letter.



Landscape Architecture
City & Regional Planning

March 1, 2013

Mr. David Taylor, Director
County of Maui, Department of Water Supply
200 South High Street
Wailuku, HI 96793-2155

Dear Mr. Taylor,

RE: Comments on the Draft Environmental Impact Statement for the Proposed Maui Research and Technology Park Master Plan update, located in Kihei, Maui, Hawaii at TMK's: (2) 2-2-024:1-9,14-18,31,32, 34, 36-46 and (2) 2-2-002:054 (por.)

Thank you for your letter of August 15, 2012; this letter supersedes the response letter dated December 4, 2012 to conform to HAR §11-200-22(c)(2) Review of Environmental Impact Statements, *"Response letters reproduced in the text of the final EIS shall indicate verbatim changes that have been made to the text of the draft EIS."* The following language is in the final EIS and can be found in Section III D. 3.

In response to comments from the County of Maui Department of Water Supply (DWS) the Applicant will cooperate with the Commission on Water Resource Management (CWRM) to determine available water use in the underlying Kamaole Aquifer. It is our project team's understanding that the CWRM judges use of the aquifer relative to its sustainable yield by the 12-month moving average of pumpage, not by the cumulative capacity of pump installations permits; therefore the proposed use, together with ongoing and other foreseeable use of the aquifer, will not exceed its sustainable yield.

It is our project team's understanding that DWS has not previously offered participation in well development in the North Waihee Aquifer. The Applicant will continue to coordinate with the Department of Water Supply and is willing to discuss alternatives to private water system development using the Kamaole Aquifer.

Brackish water desalinization was the least desirable alternative considered by the project team. In the desalinization scenario, the proposed spacing between wells and

pump capacities for these wells have been selected so as not to create a local overdraft or adversely impact existing wells and or future uses of groundwater from wells to the north or south. Therefore, in this scenario, present and future public and private users will not be adversely impacted.

However, in the mauka-to-makai corridor of groundwater flow from which the MRTP wells will draw, other future uses of this portion of the aquifer's sustainable supply would adversely impact the MRTP wells. It is anticipated that lands mauka of the MRTP may not be able to use the groundwater, and alternate sources may be necessary. It is an unavoidable impact of the desalinization alternative. The makai users in the residential areas below Piilani Highway will continue to use Maui County drinking water and will not be impacted.

In response to comments from the Maui County Department of Water Supply the proposed *Alternative 1 Offsite Brackish Wells* will not affect the water quality of the existing Maui Highlands wells. The proposed MRTP well locations have been specifically selected as not to create a local overdraft or adversely impact existing wells or future uses of groundwater from wells to the north or south.

The disposal wells for all of the desalting alternatives would be designed to deliver the RO concentrate into the depth at which the density of the receiving groundwater is similar to that of the RO concentrate (a function of temperature and salinity). This will be done so that there will be no tendency for the injected concentrate to rise into the basal lens and adversely impact its water quality, therefore there is no anticipated impact to the seed corn growing field located to the southeast of the MRTP. For the brackish desalting alternatives, the disposal depths would be somewhere in the basal lens' transition zone. For the saline groundwater desalting alternative, disposal will be at greater depth in the saltwater zone. The concentrate will be hypersaline, meaning that it will be of greater density than the receiving groundwater with no tendency to rise up into the basal lens.

The Applicant will continue to coordinate with the Department of Water Supply and is willing to discuss alternatives to private water system development using the Kamaole Aquifer.

Mr. David Taylor, Director
Comment Response Letter
MRTP FEIS
March 1, 2013
Page 3 of 3

Thank you again for providing us with your comments. Please feel free to call Ms. Jennifer Maydan, AICP or Mr. Brett Davis at (808) 242-1955 should you have any questions.

Sincerely yours,

A handwritten signature in blue ink that reads "JORDAN E. HART" followed by a date "3/1/13". The signature is written over a horizontal line.

Jordan E. Hart
President

CC. Mr. Steve Perkins, Pacific Rim Land, Inc.
Mr. Tom Nance, Tom Nance Water Resource Engineering
Project File 08-132

NEIL ABERCROMBIE
GOVERNOR OF HAWAII



LORETTA J. FUDDY, A.C.S.W., M.P.H.
DIRECTOR OF HEALTH

STATE OF HAWAII
DEPARTMENT OF HEALTH
P.O. Box 3378
HONOLULU, HAWAII 96801-3378

August 16, 2012

In reply, please refer to:
File:

12-671A CAB

RECEIVED

AUG 20 2012
DK

CHRIS HART & PARTNERS, INC.
Landscape Architecture and Planning

CC: Brett
08/13/12

Mr. Christopher L. Hart
President
Chris Hart & Partners, Inc.
115 North Market Street
Wailuku, Hawaii 96793-1717

Attention: Mr. Brett Davis

Dear Mr. Hart:

SUBJECT: Maui Research and Technology Park Master Plan Update
Draft Environmental Impact Statement (EIS)
Maui County Change in Zoning and Community Plan Amendment
Makawao District, Island of Maui

A significant potential for fugitive dust emissions exists during all phases of construction. The proposed activities will occur in proximity to public areas and thoroughfares, thereby exacerbating potential dust problems. The project must comply with the provisions of Hawaii Administrative Rules, §11-60.1-33 on Fugitive Dust.

We encourage the contractor to implement a dust control plan as stated in the draft EIS. A dust control plan, which does not require approval by the Department of Health, can assist in complying with the fugitive dust regulations. The plan may include measures identified in your report.

If you have any questions, please contact Mr. Barry Ching of the Clean Air Branch at (808) 586-4200.

Sincerely,

A handwritten signature in black ink, appearing to read "Nolan S. Hirai".

NOLAN S. HIRAI
Acting Manager, Clean Air Branch

BC:rg

c: Steve Perkins, Project Manager, Maui R&T Partners, LLC
Daniel E. Orodener, Executive Officer, State Land Use Commission,
Department of Business Economic Development & Tourism



**CHRIS
HART**
& PARTNERS, INC.

Landscape Architecture
City & Regional Planning

August 27, 2012

Mr. Nolan S. Hirai, Acting Manager
State of Hawaii, Dept. of Health
Clean Air Branch
P.O. Box 3378
Honolulu, HI 96801-3378

Dear Mr. Hirai,

RE: Comments on the Draft Environmental Impact Statement for the Proposed Maui Research and Technology Park Master Plan update, located in Kihei, Maui, Hawaii at TMK's: (2) 2-2-024:1-9,14-18,31,32, 34, 36-46 and (2) 2-2-002:054 (por.)

Thank you for your letter of August 16, 2012 with comments related to short term construction related fugitive dust emissions. Please be assured that the Developer will conform to applicable provisions of the Hawaii Administrative Rules, Chapter 11-60. 1-33 on Fugitive Dust.

Thank you again for providing us with your comments. Please feel free to call myself or Mr. Brett Davis of our office at (808) 242-1955 should you have any questions.

Sincerely yours,

Christopher L. Hart, ASLA
President
Landscape Architect • Planner

CC. Mr. Steve Perkins, Pacific Rim Land, Inc.
Project File 08-132

ALAN M. ARAKAWA
Mayor

WILLIAM R. SPENCE
Director

MICHELE CHOUTEAU McLEAN
Deputy Director



COUNTY OF MAUI
DEPARTMENT OF PLANNING

TRANSMITTAL
August 20, 2012

MEMO TO: Clayton Yoshida; Planning Program Administrator
Current Planning Division

ATTENTION: Kurt Wollenhoupt, Staff Planner

FROM: Aaron Shinmoto, Planning Program Administrator
Zoning Administration and Enforcement Division (ZAED)

A handwritten signature in black ink, appearing to read "Aaron Shinmoto".

SUBJECT: **MAUI RESEARCH AND TECHNOLOGY (MR&T) PARK MASTER PLAN
UPDATE (CHANGE IN ZONING (CIZ) & COMMUNITY PLAN AMENDMENT
(CPA), KIHAI, MAUI HAWAII; TMK: (2) 2-2-024:001-009, (2) 2-2-024:018, (2)
2-2-024:031 & 032, (2) 2-2-24:036-046, & (2) 2-2-002:054 (POR).
PROPOSED CIZ AND CPA.**

TRANSMITTED TO YOU AS INDICATED:

(X) For Your Information

(X) For Necessary Action

Our comments are noted below. These comments are not intended to be specific conditions of project approval. But, if you feel that any of them warrant a condition you may incorporate them into your recommended conditions of project approval.

1. In order to provide comments regarding the accuracy of the current community plan and county zoning boundaries, PDF copies of the Mylar maps for the proposed Community Plan Amendment (CPA) and Change in Zoning (CIZ) would need to be submitted for review.
2. After discussions with Chris Hart & Partners, we understand that the following figures will be updated to more accurately represent the project boundaries:
 - A. The project boundaries of Figure No. 5 (State Land Use), Figure No. 6 (Community Plan), and Figure No. 7 (County Zoning), pages 1,564-1,567.
 - B. The project site boundaries of Figures No. 24, 25, 26 and 27 (pages 250-253).
 - C. Note: All figures in the report should be reconfirmed by the applicant for accuracy.
3. Figure No. 27 (pg 250) of the submitted project assessment showing the county zoning boundaries does not accurately show the current zoning for following adjacent parcels:
 - A. Parcel (2) 2-2-024:012 is 100% county zoned PK-4 Golf Course (LZM#583, ORD#2919).
 - B. Parcel (2) 2-2-024:013 is 100% county zoned PK-4 Golf Course (LZM#584, ORD#2919).
 - C. Parcel (2) 2-2-024:033 is 100% county zoned R-1 Residential (LZM#556, ORD#2428).
4. The area for Community Plan Project District 6 is currently 385 acres. The Kihei-Makena Community Plan contains language for the intent of these 385 acres, of which approximately 364 acres are proposed to be changed. Parcel (2) 2-2-024:030 (20,936 acres) is currently proposed to remain as Community Plan Project District 6 and County Zoned Agriculture. With only approximately 21 acres remaining as Project District 6, the community plan intent of Project District 6 can not be maintained. Therefore, we recommend that the owners of parcel (2) 2-2-024:030 be

250 SOUTH HIGH STREET, WAILUKU, MAUI, HAWAII 96793

MAIN LINE (808) 270-7735; FACSIMILE (808) 270-7634

CURRENT DIVISION (808) 270-8205; LONG RANGE DIVISION (808) 270-7214; ZONING DIVISION (808) 270-7253



Landscape Architecture
City & Regional Planning

December 7, 2012

Mr. Aaron Shinmoto, Planning Program Administrator
County of Maui, Department of Planning
Zoning Administration and Enforcement Division (ZAED)
250 South High Street
Wailuku, HI 96793

Dear Mr. Shinmoto,

RE: Comments on the Draft Environmental Impact Statement for the Proposed Maui Research and Technology Park (MRTP) Master Plan Update, located in Kihei, Maui, Hawaii at TMK's: (2) 2-2-024:1-9,14-18,31,32, 34, 36-46 and (2) 2-2-002:054 (por.)

Thank you for your letter of August 20, 2012; I am please to provide the following responses to your numerated comments.

1. The Applicant will submit Mylar maps for the proposed Community Plan Amendment (CPA) and Change in Zoning (CIZ) for review at the time of the submittal of the Final Environmental Impact Statement (FEIS).
2. Yes, Chris Hart and Partners, Inc. (CH&P) will confirm and update the project site boundaries of the report figures as indicated in your letter.
3. CH&P will update Figure 27 to accurately show the current zoning for the parcels indentified.
4. Parcel 30 is owned by others not associated with the applicant. The applicant has sent the owner of Parcel 30 notification of the action proposed on neighboring and adjacent properties during the notice of application process for the CIZ and CPA.
5. Thank you for your comments related to on-street parking. The FEIS will include a proposed revised zoning ordinance for the Maui Research & Technology Park District which will include specific parking requirements. The parking requirements will allow for on-street parking on private roadways, joint-use

parking, centralized parking, and parking reductions and waivers where applicable. The Applicant will continue to coordinate with ZAED on developing the parking requirements.

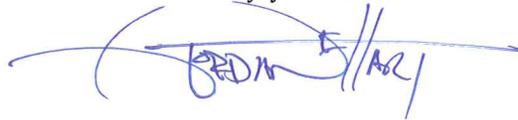
6. A. The developer will construct the proposed pedestrian and bicycle pathways concurrently with roadway improvements.

B. The two separate pathways mentioned in your comment letter will be connected by North and South Ninau Streets. These streets will become a 92-foot wide "North-South Greenway" to serve as the principal north-south route through the MRTP. This North-South Greenway (Figure 37b) will feature a divided two-lane roadway with 6-foot bicycle lane and curbside parking. 7-foot wide walkways widely separated from the moving-vehicle lanes provide a safe and inviting route for pedestrian travel.

Further south, in the Employment/Campus District, South Ninau Street will include a raised bicycle lane. This configuration raises the bicycle lane and adjacent parking lane above the level of the driving lane. (Figure 37b) will be a 72-foot-right-of-way, two lanes with an 10-foot travel lane and a 6-foot raised bicycle lane and raised 8-foot wide curbside parking. 6-foot wide concrete sidewalks will be provided on both sides of the street.

Thank you again, for providing us with your comments. Please feel free to call Ms. Jennifer Maydan, AICP or Mr. Brett Davis at (808) 242-1955 should you have any questions.

Sincerely yours,



Jordan Hart
Vice President

ENCLOSURE

CC. Mr. Steve Perkins, Pacific Rim Land, Inc.
Mr. Kurt Wollenhaupt, Staff Planner
Mr. Paul Critchlow, Staff Planner
Ms. Kathleen Kern, Staff Planner
Project File 08-132

NEIL ABERCROMBIE
GOVERNOR OF HAWAII



WILLIAM J. AILA, JR.
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

PAUL J. CONRY
INTERIM FIRST DEPUTY

WILLIAM M. TAM
DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF CONVEYANCES
COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

**HISTORIC PRESERVATION DIVISION
DEPARTMENT OF LAND AND NATURAL RESOURCES**

601 Kamokila Boulevard, Suite 555
Kapolei, HI 96806

August 27, 2012

Maui R&T Partners, LLC
1300 North Holo pono, Suite 201
Kihei, HI 96753

LOG NO: 2012.1918
LOG NO: 2012.1959
DOC NO: 1207JP12
Archaeology

Aloha Partners:

**SUBJECT: Chapter 6E-42 Historic Preservation Review-
Master Plan Update Draft Environmental Impact Statement (EIS)
Consolidated Applications for Change in Zoning (CIZ) & Community Plan Amendment
Waiohuli/Keokea Ahupua'a, Wailuku District, Island of Maui
TMKs (2)2-2-002:054(~115 ac por.) & 2-2-024:001-009; 014-018, 031; 032; 034; & 036-046**

Thank you for the opportunity to review the plans submitted by Chris Hart and Partners, Inc., received July 3, 2012. The subject area includes approximately 414 acres owned in fee simple by various landowners. Maui R&T Partners, LLC owns approximately 231 acres and Haleakala Ranch owns about 124 acres. Roadway lots and lands owned by others comprise the remaining acreage. Currently, has over 180,000 square feet of office space for over 20 high technology and professional services companies. Proposed plans include a mixed-use village center and expansion the Research and Technology Park campuses to the east and south.

Our records indicate that archaeological inventory surveys have been conducted for the project area. Most recently, we recommended archaeological work for the preliminary subdivision plat review for File Number 2.3070 (Log 2008.2909 Doc. 0807JP38). During an archaeological inventory survey (36.8 acres), a historic reservoir (*circa.* 1927) was recorded and no further work recommended (Log 2005.1188 Doc. 0506MK19). Another archaeological survey involved 341 acres that documented five historic properties including World War II era modified rock outcrops (SIHP 50-50-10-6239 and 6240), a boundary wall (SIHP 50-50-10-6241), an L-shape surface structure (SIHP 50-50-10-6587), and three traditional period semi-circular rock mounds (SIHP 50-50-10-6588). No further archaeological work was recommended at these sites (Log 2008.4513 Doc. 0810PC30 etc.).

Two culturally modified overhangs have been noted within the adjacent Waipuilani Gulch (project area perimeters are located along the top of gulch as opposed to the center line). We continue to recommend preservation of the documented boundary wall that runs along the upper edge of Wailpuilani Gulch (Site 6241). Protective orange fencing is planned for placement along the rock wall to protect the wall and the overhang sites in the gulch. Our staff will verify the placement of the orange fencing. The current submittals do not involve any ground altering activities or physical land modifications. Based on the aforementioned, we believe that no historic properties will be affected by these actions. Please contact Jenny Pickett at (808) 243-5169 or Jenny.L.Pickett@Hawaii.gov for any questions about this letter.

Mahalo,

A handwritten signature in black ink, appearing to read "Theresa Donham".

Theresa Donham
Archaeology Branch Chief

cc: County of Maui, Dept of Planning fax: (808) 270-7634
County of Maui DSA via fax to: (808) 270-7972
State LUC: Daniel Orodener P.O. Box 2359, Honolulu HI 96793
Chris Hart & Partners: Brett Davis via email: bdavis@chpmaui.com

NEIL ABERCROMBIE
GOVERNOR OF HAWAII



RECEIVED

DEC 1 0 2012

PACIFIC RIM LAND, INC.
MAUI - MAIN

WILLIAM J. AILA, JR.
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

ESTHER KIA'AINA
FIRST DEPUTY

WILLIAM M. TAM
DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF CONVEYANCES
COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES ENFORCEMENT
ENGINEERING

FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

**HISTORIC PRESERVATION DIVISION
DEPARTMENT OF LAND AND NATURAL RESOURCES**

601 Kamokila Boulevard, Suite 555
Kapolei, HI 96806

December 6, 2012

Maui R&T Partners, LLC
1300 North Holopono, Suite 201
Kihei, HI 96753

LOG NO: 2012.1959
DOC NO: 1211JP24
Archaeology

Aloha Partners:

**SUBJECT: Chapter 6E-42 Historic Preservation Review-
Draft Environmental Impact Statement (EIS) Consolidated Applications for Change in
Zoning (CIZ) & Community Plan Amendment for the Maui Research and Technology Park
Waiohuli/Keokea Ahupua'a, Wailuku District, Island of Maui
TMKs (2)2-2-002:054 and 2-2-024:001-009, 014-018, 031, 032, 034, 036-046**

Thank you for the opportunity to review the plans submitted by Chris Hart and Partners, Inc. We received two copies, one at our Kapolei office (July 3) and the other at our Maui office (July 9, 2012). This letter is a follow-up to our original review per a request by Brett Davis (*Log No 2012.1918, Doc No 1207JP12*). The subject area is approximately 414 acres. Maui R&T Partners, LLC owns approximately 231 acres and Haleakala Ranch owns about 124 acres. Roadway lots and lands owned by others comprise the remaining acreage. Currently, the Research and Technology Park has over 180,000 square feet of office space for over 20 high technology and professional services companies. Proposed plans include a mixed-use village center and knowledge-industry expansion campuses to the east and south; at build-out (2034), the Park will include approximately 2 million square feet together with 1,250 single family (60%) and multi-family (40%) residences.

In 2008, we recommended archaeological work for the preliminary subdivision plat review for File Number 2.3070 (*Log No 2008.2909, Doc No: 0807JP38*). An archaeological survey covered 341 acres and documented four historic properties including World War II era modified rock outcrops (SIHP 50-50-10-6239 and -6240), a boundary wall (SIHP 50-50-10-6241), an L-shape surface structure (SIHP 50-50-10-6587), and three traditional Hawaiian semi-circular rock mounds (SIHP 50-50-10-6588). No further archaeological work was recommended (*Log No 2008.4513, Doc No: 0810PC30*). Two culturally modified overhangs were noted but not recorded within the adjacent Waipuilani Gulch (project area perimeters are located along the top of the gulch as opposed to the center line of the gulch). We continue to recommend preservation of the documented boundary wall (50-50-10-6241). We look forward to the implementation of the archaeological preservation plan.

It is possible that future construction work may inadvertently impact the two archaeological features (overhangs) located in Waipuilani Gulch. Protective orange fencing will be placed along the documented rock wall; as an interim strategy to protect the wall and overhangs during construction. The submittals do not involve any specified ground altering activities or physical land modifications at this time. Based on the aforementioned, we believe that **no historic properties will be affected** by the proposed change in zoning. Please contact Jenny Pickett at (808) 243-5169 or Jenny.L.Pickett@Hawaii.gov for any questions about this letter.

Mahalo,

A handwritten signature in black ink, appearing to read "Theresa Donham".

Theresa Donham
Archaeology Branch Chief

cc: Brett Davis, Chris Hart Partners via email: bdavis@chpmaui.com



Landscape Architecture
City & Regional Planning

December 19, 2012

Ms. Theresa Donham, Archaeology Branch Chief
State of Hawaii, Dept. of Land & Natural Resources
State Historic Preservation Division
601 Kamokila Blvd., Suite 555
Kapolei, HI 96806

Dear Mr. Mayne,

RE: Comments on the Draft Environmental Impact Statement for the Proposed Maui Research and Technology Park Master Plan update, located in Kihei, Maui, Hawaii at TMK's: (2) 2-2-024:1-9,14-18,31,32, 34, 36-46 and (2) 2-2-002:054 (por.)

Thank you for your letters of August 27, 2012 and December 6, 2012 providing comments on the above referenced project. We understand that the State Historic Preservation Division has determined that no historic properties will be affected by the proposed project. As noted in the Final Environmental Impact Statement and Archaeological Inventory Survey, an orange protective fence will be placed along Site - 6241 (boundary wall) on the northern ridgeline boundary of Parcel 17 to protect two undocumented rock shelters occurring off-site in Waipuilani Gulch.

Thank you again for providing us with your comments. Please feel free to call myself or Mr. Brett Davis of our office at (808) 242-1955 should you have any questions.

Sincerely yours,

Jordan E. Hart
President

CC. Mr. Steve Perkins, Pacific Rim Land, Inc.
Project File 08-132 ✓



UNIVERSITY
of HAWAII
MĀNOA

Water Resources Research Center
Environmental Center

August 30, 2012
RE: 2012-06-23-03 -02

Mr. Steve Perkins, Project Manager
Maui R&T Partners, LLC
1300 North Holo pono, Suite 201
Kihei, Hawaii 96753
stevep@pacificrimland.com
FAX (808) 879-2557

Dear Mr. Perkins:

**Draft Environmental Impact Statement
Maui Research and Technology Park Master Plan Update
Kihei, Maui**

Maui R&T Partners, LLC ("applicant") proposes to obtain discretionary state and county entitlements that would enable it to implement an updated master plan for the 414 acre Maui Research and Technology Park (MRTP). Under this plan, full build-out of the MRTP would include new construction of approximately:

- (1) 2 million square feet of non-residential buildings on 160 acres;
- (2) 750 single family residences on 61 acres, at densities ranging from 11.1 to 28.6 units/acre;
- (3) 500 multi-family residences on 18 acres, at densities ranging from 9.2 to 30.4 units/acre;
- (4) 82 acres of roadways;
- (5) 89 acres of parks and open space, including a 5.5 acre retention pond; and
- (6) support infrastructure including irrigation and drainage systems, water treatment and distribution systems, wastewater collection and transmission systems, and electrical systems.

The plan anticipates 5,478 new on-site workers, an additional off-site workforce of 1,469, and a resident population of 2,367 full-time residents and 390 part-time residents, including 180 hotel guests.

This review of Maui R&T Partners, LLC's Draft Environmental Impact Statement (DEIS) is a service activity of the University of Hawaii Environmental Center to help determine and maintain the optimum quality of the environment. It does not represent the official views of the University of Hawaii. The objectives of our review process are to enhance environmental consciousness, encourage cooperation and coordination, and facilitate public participation. This review was conducted with the assistance of Philip Wirdzek, University of Hawaii Sea Grant College Program, and Sara Bolduc, Environmental Center.

RE: 2012-06-23-03-02

Page 2 of 6

General Comments

The complete scope of the proposed actions is unknown, which complicates the task of identifying potential environmental impacts, assessing their significance, and evaluating proposed mitigation measures. Therefore, it may be useful to more precisely summarize this scope in a prominent, introductory portion of the DEIS.

For example, the applicant requested that the State Land Use Commission (LUC) amend the existing agricultural district boundary to place 256 acres for the MRTP within the urban district boundary, and amend the conditions placed upon 158 acres of currently urbanized MRTP lands. It may be useful for the DEIS to disclose the specific changes to existing conditions that the applicant requested. Also, the applicant will request that the Maui County Council ("Council") change the zoning for an unspecified area (size/location) of the MRTP from "Agricultural" to "Research and Technology Park." It may be useful for the DEIS to more prominently disclose the specific size and location of the proposed zoning change, and to fully specify the proposed changes to the language of the Maui County Code governing the Kihei Research & Technology Park that would "allow for a more diversified development that is appropriate as represented in the Master Plan Update," as discussed below in our comments on unresolved issues.

Unresolved Issues

The DEIS identifies three unresolved issues that we would expect to be advanced towards resolution in the Final EIS (FEIS). Our review identified additional unresolved issues concerning property ownership, compliance responsibilities, and operation and maintenance of mitigative measures and programs.

1. Potable Water Source

The DEIS indicates that the MRTP would obtain potable water from some combination of municipal supply and treated Kamaole groundwater. However, the DEIS presents inconsistent estimates of the amount of potable water that would be needed to support full build-out of the MRTP. Appendix J estimates that treated Kamaole groundwater would provide 956,088 GPD of average potable demand, however other sections of the DEIS report significantly lower figures for average daily demand for both potable and non-potable water (e.g. pages 119 and 202-203). Which numbers are correct?

The MRTP is just one of many proposed actions that seeks to utilize water from these sources. The cumulative impacts of extracting Kamaole groundwater, treating it for potable use, and disposing of post-treatment brine in order to fulfill regional growth projections seems to merit more detailed attention in the DEIS. It may be useful for the DEIS to (1) note that the Commission on Water Resource Management set the sustainable yield of the Kamaole aquifer at 11 MGD, (2) tabulate the proposed actions that may be competing for the available water, and (3) provide a reference for the statement that "[f]or a thin basal lens such as exists in this area, the CWRM sets the sustainable yield at 44 percent of the groundwater flowrate" (page 120).

RE: 2012-06-23-03-02

Page 3 of 6

If the salinity of active downgradient wells might increase on the order of 10 percent as a result of MRTP pumpage alone, how much more might downgradient salinity increase if upgradient pumpage of the Kamaole aquifer grew to the full extent of its sustainable yield, and beyond? What would be the difference in electricity costs and carbon footprints for various scenarios of Kamaole pumpage and treatment? What would be the options and impacts for brine disposal? What is the basis for the statement on page 121 that “post-development rainfall . . . will have increases of nitrogen and phosphorus . . . ?”

2. Uncertainty about the future of a new north-south collector roadway

The DEIS explains that estimated projected growth in Kihei-Makena to 2034 will prompt the need for a new north-south bypass roadway mauka of Piilani Highway. However, the costly future roadway development of a new north south collector roadway mauka of Piilani Highway, and its associated schedule of development, cost sharing, and funding sources are unresolved issues. Is there any sort of commitment on behalf of the applicant for contributing to the construction of such a roadway?

3. Amendments to Maui County Code

Various sections of the DEIS contain partial information about the substance of the proposed amendments that would be required to implement the master plan, such as reducing the two-acre lot size limitation. In order to help readers better grasp the potential environmental effects of the proposed construction, it may be useful for the DEIS to include a table which spells out the proposed, specific changes to major subsections of the code, including:

- Permitted uses - What additional uses would be permitted?
- Area regulations - What would be the minimum lot size? If minimum frontage requirements would change, then how so?
- Height regulations - If maximum building height and maximum number of stories would change, then how so?
- Yard setbacks - If yard setbacks would change, then how so?
- Building coverage - If the maximum site area covered by structures would change, then how so?
- Performance Standards
- Environmental Controls

4. Property ownership, compliance responsibility, and operation and maintenance of mitigative measures and programs.

Different patterns of property ownership, compliance responsibility, and operation and maintenance of mitigative measures and programs can produce a wide range of environmental results. For example, depending upon these arrangements, it is possible that all or part of the proposed environmental management infrastructure of MRTP would be maintained by (1) the existing MRTP property owner, (2) new, individual property owners, or (3) an association of individual MRTP property owners. It may be useful for the DEIS to distinguish between the management capability of these groups, discuss the strengths and weaknesses of any mitigation-

RE: 2012-06-23-03-02

Page 4 of 6

related covenants that might be imposed on new property owners, and assess the range of environmental results that might be produced. The DEIS references a "Maui Research and Technology Park Development Code" that may provide a useful appendix to the DEIS in this regard.

Other Specific Comments

1. Population and workforce

The 2010 census reported 2.89 persons as the average household size in Maui County. Why is the average household size within the MRTP projected to be over 20% less than the county average?

The MRTP is projected to create almost 7,000 new jobs, and would provide 1,250 new residences. The proportion of this workforce that (1) would be imported from offshore, and (2) would join the local housing market could bear significantly on the overall effects of MRTP operations. How much of this workforce already resides in Maui County, and how many would enter the non-MRTP housing market. Would sufficient additional housing be available at affordable prices, and how far from the MRTP would it be located?

2. Bike Lanes

Figures 37b, 37c, and 37d do not show any provisions for bikeway lanes. It may be useful to show where bikeway lanes would occur on the Parkway, Greenways, Connector, and local streets.

3. Transportation Demand Management

"Current employees of the [existing] Park are required to drive to and from work and since few daytime amenities exist, the Park is entirely automobile dependent" (page 3). In light of this, the DEIS presents various Transportation Demand Management Measures (TDMM) as possible ways to promote favorable impacts to traffic in and around the project area. However, even if each of the estimated 2,000 adult residents of the MRTP community was employed within the MRTP, almost 3,500 additional workers would visit the MRTP on a daily basis. Because the MRTP cannot control the implementation of proposals such as (1) connectivity with future adjacent developments and (2) alternate work schedules and off peak hours, it may be useful for the DEIS to portray a range of potential traffic impacts and other environmental impacts (e.g. carbon footprint) that may occur across a range of TDMM implementation. Recent Maui County initiatives to promote electric vehicle use may be a significant factor in this discussion.

4. Alternatives Analysis

The alternatives analysis focuses on differences in project benefits rather than differences in potential environmental effects, proposed mitigation measures, and resulting impacts. It may

RE: 2012-06-23-03-02

Page 5 of 6

be useful to provide a more balanced accounting of social benefits and environmental costs in order to better help decisionmakers to evaluate the tradeoffs between various alternatives.

5. Drainage System

The DEIS notes that “[e]ach commercial and institutional lot will be required to mitigate its own increase in peak runoff . . . by constructing subsurface storage chambers or above-ground drainage ponds within each lot” (p. 196). However, developments within the MRTTP would merely be “encouraged to adopt operational policies aimed at reducing urban pollutants in storm runoff (p. 199).” Overall, it is unclear who would be responsible for implementing the MRTTP stormwater management plan and the extent to which it would actually be implemented. The ongoing maintenance of infiltration features is a particular concern, as they will fill up, plug up, and lose effectiveness over time. In the face of this uncertainty, it may be useful for the DEIS to discuss how water quality impacts may vary across the potential range of stormwater management plan implementation accomplishments.

It may be useful for the DEIS to include additional information about the relationship between drainage water quality and the receiving waters for the MRTTP drainage area, based on the water quality impairments for the region that are listed in the 2008/2010 State of Hawaii Water Quality Monitoring and Assessment Report. How would the proposed action provide data that could be used to assist the pollutant loading analysis that is required for these waters, and how would the mitigation measures proposed in the drainage master plan contribute to the load reductions that are necessary in order for these receiving waters to achieve the water quality objectives defined by the state water quality standards?

Basic conformance with county drainage standards and the voluntary implementation of other BMPs and mitigation measures does not equate to or guarantee achievement of state water quality standards. Accommodating the safe passage of offsite storm runoff through the MRTTP project area, though legal, may not be the optimum strategy for comprehensive water quality management at the basin scale that properly addresses cumulative and secondary impacts of the proposed actions and their neighboring counterparts.

Housekeeping

1. Length and Organization of Document

We appreciate the effort that went into providing the community and law-makers with a comprehensive assessment of the potential impacts of this proposed action. However, a complete and thorough review of this DEIS was difficult because the document is over 1500 pages long, and the electronic version has confounding bookmarks that hinder its navigation. It may be useful to shorten sections of the document by focusing on reporting important points, rather than duplicating the technical study from where the conclusions came.

While we value the attempt at a more systematic approach to assessing the relationship between the proposed action and Environmental Plans, Policies and Controls (Section IV), much of the information contained within the table prepared for this section is inapplicable to the proposed action and may be otherwise unnecessary. The pertinent qualitative analysis contained

RE: 2012-06-23-03-02

Page 6 of 6

within the tables seems buried amidst a great deal of unneeded information. Perhaps it would be useful to extract the pertinent analysis and condense the applicable portions of the remaining table.

Thank you for considering our comments on this Draft Environmental Impact Statement. We hope that our comments will help to improve the usefulness of the Final Environmental Impact Statement for regulatory authorities who must weigh carefully whether the social benefits of the proposed action would justify the environmental impacts that would likely occur. When the Final Environmental Impact Statement is distributed, please send one printed copy to the Environmental Center.

Sincerely,



David Penn, Assistant Specialist

cc: State of Hawaii Office of Environmental Quality Control
State of Hawaii Department of Business, Economic Development and Tourism, Land Use
Commission
Chris Hart & Partners, Inc. (Mr. Brett Davis)
Philip Wirdzek.
Sara Bolduc
Chittaranjan Ray, Interim Director



Landscape Architecture
City & Regional Planning

March 1, 2013

Mr. David Penn, Assistant Specialist
UH Environmental Center
2500 Dole St. Kruass Annex 19
Honolulu, HI 96822

Dear Mr. Penn,

RE: Comments on the Draft Environmental Impact Statement for the Proposed Maui Research and Technology Park Master Plan update, located in Kihei, Maui, Hawaii at TMK's: (2) 2-2-024:1-9,14-18,31,32, 34, 36-46 and (2) 2-2-002:054 (por.)

Thank you for your letter of August 30, 2012.

General Comments

The FEIS includes the specific acreage and location of the proposed zoning change and Community Plan Amendment. In addition the proposed changes to the language of the Maui County Code are in a newly drafted Ordinance 19.33A, which is included in FEIS as an Appendix O "Draft Ordinance Chapter 19.33A, MCC".

Unresolved Issues

1. Potable Water Source

A. The DEIS indicates that the MRTP would obtain potable water from some combination of municipal supply and treated Kamaole groundwater. However, the DEIS presents inconsistent estimates of the amount of potable water that would be needed to support full build-out of the MRTP. Appendix J estimates that treated Kamaole groundwater would provide 956,088 GPD of average potable demand, however other sections of the DEIS report significantly lower figures (798,065 GPD) for average daily demand for both potable and non-potable water. Which numbers are correct?

798,065 GPD is the correct number. The following language is in the Final EIS and can be found in section III.A.11. Groundwater. In response to the UH Environmental Center comments, Appendix J "Evaluation of Source of Supply Alternatives for the Planned Expansion of the Maui Research and Technology Park" was removed because the study was mistakenly included in the Draft EIS. The correct "Assessment of the Potential

Impact on Groundwater Resources” study was also included in the Draft EIS and is the correct report. The projected water demand for the Project is approximately 1.39 1.17 MGD. Of this amount approximately 956,088 798,065 GPD is for drinking water and 439,657 373,329 GPD is for non-drinking water. Potable drinking water will be supplied by using brackish groundwater treated to potable quality by reverse osmosis (RO) filtration. Most of the non-potable non-drinking water irrigation use will be wastewater treated to R-1 quality at the County’s Kihei Wastewater Treatment Plant (WWTP). The R-1 supply will be supplemented by untreated brackish groundwater when needed.

B. The MRTP is just one of many proposed actions that seeks to utilize water from these sources. The cumulative impacts of extracting Kamaole groundwater, treating it for potable use, and disposing of post-treatment brine in order to fulfill regional growth projections seems to merit more detailed attention in the DEIS. It may be useful for the DEIS to

1. Note that the Commission on Water Resource Management set the sustainable yield of the Kamaole aquifer at 11 MGD

The Applicant agrees with this comment.

2. Tabulate the proposed actions that may be competing for available water, and

To tabulate proposed actions is almost impossible. The project team is not in a position to know about all proposed projects, and of the projects that are known, it is not certain that they going to be built. According to our project team water engineer, major projects have been proposed: 1) Wailea 670 (now known as Honua’ula), 2) A joint project of Kaonoulu and Haleakala Ranches, 3) A&B development in North Kihei. These could require 3MGD in total.

3. Provide a reference for the statement that “for a thin basal lens such as exists in this area, the CWRM sets the sustainable yield at 44 percent of the groundwater flow rate.

In the State of Hawaii Water Resources Protection Plan, the Water Commission uses 44% as the sustainable yield for basal groundwater with static water levels of 10 feet or less. The Plan was updated in 2008 and is available at:
http://hawaii.gov/dlnr/cwrm/planning_wrpp.htm

C. If the salinity of active down gradient wells might increase on the order of 10 percent as a result of MRTP pumpage alone, how much more might down gradient salinity increase if up gradient pumpage of the Kamaole aquifer grew to the full extent of it’s sustainable yield, and beyond?

The State of Hawaii Water Commission regulates the Kamaole Aquifer as a single “pot” of water regardless of where in the aquifer that use occurs. Ground

water moves in mauka to makai corridors. Therefore the analysis of potential interference effects to uses on the mauka makai corridor in question. The MRTP is near the north end of the Kamaole Aquifer and almost all current pumpage is in the South end of the Kamaole Aquifer for the Wailea and Makena golf courses. To our knowledge, no other pumpage in the project's mauka to makai corridor is planned or proposed and the Applicant is relying on the Water Commission to continue to monitor the use of the Kamaole Aquifer.

1. What would be the difference in electricity costs and carbon footprints of various scenarios of Kamaole pumpage and treatment?

The difference between electricity costs was estimated for the 2 desalinization alternatives,

- Electricity Cost of off-site wells was \$2.61 per 1000 gallons.
- Electricity costs of on-site wells cost is \$2.94 per 1000 gallons.
- *Estimates based on 37 cents per kilowatt hour for electrical power.

2. What would be the options and impacts for brine disposal?

The desalinization alternative will not produce brine, which is hyper saline water. The concentrate of the reverse osmosis process will be brackish but too saline for irrigation reuse. It will be disposed into the transition zone below basal lens where the receiving groundwater salinity is similar to the concentrate. This disposal will not impact the Kamaole Aquifer.

3. What is the basis for the state that "post-development rainfall...will have increases of nitrogen and phosphorus?"

There will be no change in the rainfall. However the fraction of the rainfall percolating to groundwater will pick up nitrogen and phosphorus as it passes through the plant root zone.

2. Uncertainty about the future of a new north-south collector roadway.

Further clarifying information regarding the Mauka collector roadway is provided below. The roadway is not included in the current STIP, as it is not anticipated to be necessary for many years. However, the community and County government have carefully planned for and considered the eventual need for the road.

The MRTP project is located within the urban growth boundary, and is sited within an area of directed growth adjacent to existing development and required infrastructure. The plan further identifies MRTP as an important employment center, and includes the broad theme of infrastructure (which would include roads) improvements being prioritized and allocated to directed growth areas.

A North South roadway mauka of Piilani, to be constructed as growth in the region warrants, is also identified as being supported in the 1998 Kihei-Makena Community Plan.

The Maui Island plan also contemplates a future north south roadway in several sections, and depicts the road on a map (attached). The directed growth chapter description of the Maui Research and Technology Park, states "the build-out of MRTP should be coordinated with the development of the neighboring Kihei Mauka planned growth area to ensure efficient intra- and inter-regional transportation connectivity for both motorized and non-motorized transportation". Similar directions are included in the project descriptions of Kihei Mauka and the North Kihei residential planned growth areas to the north of MRTP. The applicant has initiated discussions with other landowners about providing a continuous in-tract mauka collector roadway as directed by the County general plan. When available, records of these discussions will be furnished for HDOT's information.

In addition, community testimony in support of an interconnected mauka transportation corridor has been provided to the Regional Long Range Land Transportation Plan project for Maui, and additional testimony will be provided in favor of the concept when the draft plan is circulated.

3. Amendments to Maui Code.

The DEIS did not contain an amended draft Code. The draft Code is found as an Appendix O "Draft Ordinance Chapter 19.33A, MCC".

4. Property ownership, compliance responsibility and operation and maintenance of mitigative measures and programs.

The environmental management infrastructure will be maintained by an association of individual property owners. The draft ordinance Chapter 19.33A and the development code defines the management capability of the MRTP and are found in Appendices O and Q in the FEIS)

Other Specific Comments

1. Population and Workforce

The Average household size throughout Maui County was reported at 2.89 persons in the 2010 census, the average varies dramatically between the Islands and Districts of which it is comprised. The average declined from 2.91 in the 2000 census.

According to the census, the average household size in the Kihei-Makena District (the effective study area) was 2.499 persons in 2010, dropping from 2.6 persons in 2000.

Forty years ago, the average household size in Kihei-Makena was 2.87 persons and regional households have gotten smaller with each passing census.

The movement towards smaller households is an indisputable demographic trend, brought about by numerous factors (including longer life spans, higher incomes, more divorces and single parent households, in-migrating retirees, cultural evolutions). Declines will inevitably continue and stabilization will not be for several decades, at best. The County Planning Department recognizes these realities in their population projections. By 2030, they forecast an average household size of 2.42 person in Kihei-Makena. Our trending analysis indicates the figure could decline to as low as 2.35 persons over the next two decades.

In light of historical trends, current levels and forecasts, our use of an average size of 2.5 persons per resident household at the MRTP is moderate to conservative. It is well above the 2.41 persons projected by County agencies for Kihei-Makena by the time the MRTP is full built out.

2. Bike Lanes

Bike lanes are shown on updated Figures 37b, c, and d in the FEIS. The Bike lanes are located adjacent to the street.

3. Transportation Demand Management

The MRTP transportation demand management strategies support methods such as ridesharing, bicycle and pedestrian use, off-peak commuting and other measures as discussed in the TIAR in Appendix G of FEIS document.

4. Alternative Analysis

The EIS document provided an analysis of the social benefits and environmental costs for each of the identified alternatives. The MRTP is urban land use designated for future development in South Maui and the alternatives analyzed various components/densities of urban development scenarios. Each alternative section of the EIS provided potential benefits and impacts as a result of each of the alternatives.

Mr. David Penn, Assistant Specialist
MRTTP Comment Response Letter
March 1, 2013
Page 6 of 6

5. Drainage System

The drainage master plan has been prepared and designed in accordance with Hawaii Revised Statutes, and Maui County Code rules and regulations. The Drainage system will be maintained by Association of MRTTP owners and has been designed to not impact State water quality standards.

Housekeeping

Chris Hart and Partners, Inc. (Planning Consultant, and preparer of EIS document) have reviewed your recommendations and will take them into consideration for future EIS projects in order to provide a more condensed report.

Thank you again for providing us with your response. Please feel free to call Ms. Jennifer Maydan, AICP or Mr. Brett Davis of our office at (808) 242-1955 should you have any questions.

Sincerely yours,

A handwritten signature in blue ink, appearing to read "Jordan E. Hart", with a long horizontal flourish extending to the right.

Jordan E. Hart
President

CC. Mr. Steve Perkins, Pacific Rim Land, Inc.
Project File 08-132

NEIL ABERCROMBIE
GOVERNOR



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
869 PUNCHBOWL STREET
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GLENN M. OKIMOTO
DIRECTOR

Deputy Directors
JADE T. BUTAY
FORD N. FUCHIGAMI
RANDY GRUNE
JADINE URASAKI

IN REPLY REFER TO:

STP 8.0942

RECEIVED

AUG 21 2012

CHRIS HART & PARTNERS, INC.
Landscape Architecture and Planning

cc: *brt*

08/132

August 14, 2012

Mr. Steve Perkins
Project Manager
Maui R&T Partners, LLC
1300 North Holopono, Suite 201
Kihei, Hawaii 96753

Dear Mr. Perkins:

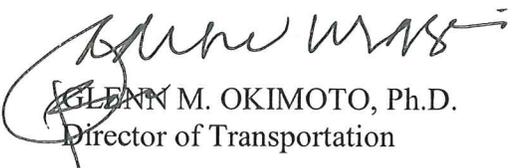
Subject: Maui Research and Technology Park Master Plan Update -
Draft Environmental Impact Statement (DEIS), Maui County
Change in Zoning (CIZ) and Community Plan Amendment (CPA)
TMK: (2) 2-2-024:001-009, 014-018, 031-032, 034, 036-046 and
2-2-002:054 (por)

Thank you for requesting the State Department of Transportation's (DOT) review of the subject project. DOT understands the applicant is seeking to update the Master Plan for the Maui Research and Technology Park. The vision is to transform the current single use large lot research and technology campus into an integrated and vibrant mixed use community focused around a regional high technology employment base.

Given that access to the project will be from Piilani Highway, the DOT has an interest in the subject project. DOT Highways Division is still conducting its review and will provide additional comments as necessary.

DOT appreciates the opportunity to provide comments. If there are any questions, including the need to meet with DOT staff, please contact Mr. Garrett Smith of the DOT Statewide Transportation Planning Office at telephone number (808) 831-7976.

Very truly yours,


GLENN M. OKIMOTO, Ph.D.
Director of Transportation

c: Daniel Orodenker, LUC
Brett Davis, Chris Hart & Partners

NEIL ABERCROMBIE
GOVERNOR



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
869 PUNCHBOWL STREET
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GLENN M. OKIMOTO
DIRECTOR

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RANDY GRUNE
JADINE URASAKI

IN REPLY REFER TO:

STP 8.0971

RECEIVED

SEP 27 2012

CHRIS HART & PARTNERS, INC.
Landscape Architecture and Planning
CC: Brett 08/132

September 20, 2012

Mr. Steve Perkins
Project Manager
Maui R&T Partners, LLC
1300 North Holopono, Suite 201
Kihei, Hawaii 96753

Dear Mr. Perkins:

Subject: Maui Research and Technology Park (MRTP) Master Plan Update
Draft Environmental Impact Statement (DEIS)
Maui County Change in Zoning (CIZ) and Community Plan
Amendment (CPA)
TMK: (2) 2-2-024:001-009, 014-018, 031-032, 034, 036-046 and
2-2-002:054 (por.)

The State Department of Transportation (DOT) previously commented on the DEIS in its letter STP 8.0942 dated August 14, 2012 (attached) and now offers the following supplemental comments.

The DOT Highways staff has completed its review of the DEIS and the Traffic Impact Analysis Report (TIAR). DOT is concerned with the impacts the proposed Maui Research and Tech Park (MRTP) development will have on the capacity of Piilani Highway. The increased land use will cause vehicular capacity, operational, and safety impacts to Piilani Highway. Piilani Highway currently operates at Level of Service (LOS) "C" but DOT estimates the highway to operate at LOS "F" in horizon year 2035. However as recommended in the Maui Long-Range Land Transportation Plan dated February 1997, the North/South Collector Road (Liloa Drive Extension) located to the West of and parallel to Piilani Highway that extends from Uwapo Road to Kanani Road, should be considered in the TIAR.

DOT offers the following comments on the TIAR:

1. The TIAR shall be revised for DOT review and acceptance prior to approval of a change of zone. The TIAR shall provide and validate all recommended mitigation measures for potential project-related traffic impacts on State highway facilities to the satisfaction of the DOT.
2. Additional improvements to the existing access from the Lipoa Parkway shall be subject to the review and approval of the DOT.

3. The new vehicular access from the proposed Hookena Street/Piilani Highway intersection, opposite the existing East Waipulani Road right-turn in and right-turn out intersection, may be allowed subject to the review approval of DOT and prior to the approval of the change in zone. The existing 80-foot wide permitted vehicular access at that approximate location shall be validated.
4. The operation and safety of the Old East Welakahao Road/Piilani Highway intersection, located approximately 1,200 feet South of the existing East Welakahao Road (North)/Piilani Highway intersection, shall be subject to the review and approval of the DOT. Concern exists regarding the additional vehicular traffic from the proposed vehicular access to the MRTTP from the Old East Welakaho Road (not a State highway facility).
5. The Trip Generation rate for each land use Institute of Transportation (ITE) code, based on the ITE Trip Generation, should be indicated in the Trip Generation Summary Tables. The ITE mid-rise apartment code 223 should not be used for the entire 1,250 dwelling units (DU) since 750 DU of those units are planned for single family.
6. The internal capture rate should be indicated and justified for each land use and shall be subject to review and acceptance by DOT. DOT generally limits the internal capture rate to 15% maximum.
7. The use of a 5% reduction for transit share is not acceptable, as the ITE Trip Generation rates already take into account transit share.
8. The Liloa Drive Extension (North/South Collector Road located of and parallel to Piilani Highway between Kaonoulu Street and Kanani Road) and the proposed North/South Collector Road (located Mauka of Piilani Highway to provide direct access to Mokulele Highway) shall not be included in any analysis. Neither project is listed in the Statewide Transportation Improvement Program and is not committed.
9. The TIAR shall provide analysis for year 2024 and year 2034 traffic conditions "without the project" and "with the project" and including only committed roadway projects assumed to be in place. Under this scenario, the Liloa Drive Extension North/South Collector Road Makai of and parallel to Piilani Highway and the proposed North/South Collector Road Mauka of Piilani Highway should not be included in the analysis.
10. LOS "D" or better shall be required for all movements along Piilani Highway at the intersections with Lipoa Parkway, Hookena Street, and Old East Welakahao Road, with the project and with transportation mitigations.
11. The study intersections shall include all intersections along Piilani Highway where traffic is projected to increase by 5% or more with the project.

Mr. Steven Perkins
September 20, 2012
Page 3

STP 8.0971

12. The TIAR shall provide a schedule of phases and timing of recommended mitigative transportation improvements of each respective phase and development thresholds to guide implementation of mitigative measures.

13. Recommendations for mitigation shall also include the Applicant's fair share contribution to the cost of regional improvements to State highways and/or traffic mitigation measures that will help to alleviate the transportation impacts generated by the project, as determined by the Applicant and DOT.

DOT appreciates the opportunity to provide comments. If there are any questions, including the need to meet with DOT staff, please contact Mr. Garrett Smith of the DOT Statewide Transportation Planning Office at telephone number (808) 831-7976.

Very truly yours,



GLENN M. OKIMOTO, Ph.D.
Director of Transportation

Attachment: Ltr. STP 8.0942 Dtd. 08/14/12

c: Daniel Orodener, Land Use Commission
Brett Davis, Chris Hart & Partners, Inc.



Landscape Architecture
City & Regional Planning

March 1, 2013

Mr. Glenn M. Okimoto, Ph.D., Director
State of Hawaii Department of Transportation
869 Punchbowl Street
Honolulu, Hawaii 96813-5097

Dear Mr. Okimoto,

RE: Comments on the Draft Environmental Impact Statement for the Proposed Maui Research and Technology Park Master Plan update, located in Kihei, Maui, Hawaii at TMK's: (2) 2-2-024:1-9,14-18,31,32, 34, 36-46 and (2) 2-2-002:054 (por.)

Thank you for your letter of September 20, 2012 indicating that the Department of Transportation has the following comments. The following language is included in final EIS in Section III.D.1 Roadways, and below.

1. *The TIAR shall be revised for DOT review and acceptance prior to approval of a change of zone. The TIAR shall provide and validate all recommended mitigation measures for potential project-related traffic impacts on State highways facilities to the satisfaction of the DOT.*

The Applicant will work with HDOT to submit a revised TIAR prior to zone change approval.

2. *Additional improvements to the existing access for the Lipoa Parkway shall be subject to the review and approval of the DOT.*

The Applicant acknowledges that additional improvements to the existing access for the Lipoa Parkway shall be subject to the review and approval of the DOT.

3. *The new vehicular access from the proposed Hookena Street/ Piilani Highway intersection, opposite the existing East Waipulani Road right-turn in and right-turn out intersection, may be allowed subject to the review approval of the DOT and prior to the approval of the change in zone. The existing 80-foot wide permitted vehicular access at that approximate location shall be validated.*

The Applicant acknowledges that the proposed intersection may be allowed subject to review and approval of DOT prior to the approval of the change in zone and the 80-foot wide permitted vehicular access location must be validated with the DOT.

- 4. The operation and safety of the Old East Welakahao Road/Piilani Highway intersection, located approximately 1,200 feet south of the existing East Welakahao Road (North)/Piilani Highway intersection, shall be subject to the review and approval of the DOT. Concern exists regarding the additional vehicular traffic from the proposed vehicular access to the MRTP from the Old East Welakaho Road (not a State Highway facility).*

The Applicant acknowledges that the proposed intersection may be allowed subject to review and approval of DOT prior to the approval of the change in zone and the 80-foot wide permitted vehicular access location must be validated with the DOT.

- 5. The trip Generation rate for each land use Institute of Transportation (ITE) code, based on the ITE Trip Generation, should be indicated in the Trip Generation Summary Tables. The ITE mid-rise apartment code 223 should not be used for the entire 1,250 dwelling units (DU) since 750 DU of those units are planned for single family.*

The residential was broken down into 60% single family, 20% townhouse, and 20% mid-rise apartment land uses. The trip generation in the revised TIAR represents the sum of these three (3) residential types.

- 6. The internal capture rate should be indicated and justified for each land use and shall be subject to review and acceptance by DOT. DOT generally limits the internal capture rate to 15% maximum.*

The Applicant will work with HDOT to estimate the external trips based on the assumed low, medium, and high internal capture rates. This would provide HDOT a useful tool to gauge the traffic impact by different levels of internal capture. Internal capture for local school and community shopping center are not clearly defined by the ITE Trip Generation Manual. The planned elementary school will be built largely for the Maui R&T Park development. It is not anticipated that the school will generate a significant amount of external trips. Similarly the community shopping center as currently planned is not visible from Piilani Highway and will mostly serve the Maui R&T Park development. With Kihei Elementary School nearby and other more convenient shopping centers located makai of Piilani Highway, the Applicant will assume higher than 15% internal capture rates for the planned school and community shopping center.

In addition, the development will utilize the principles of new urbanism and smart growth providing diverse housing options within close proximity of the park's employment and integrating neighborhood serving retail, civic and commercial uses in a manner that

encourages bicycling and walking. The residential component of the development will be targeted at the employees of the MRTP which will reduce the need for workers to drive to and from work. For conservative purposes, we agree that 15% internal capture applies to residential and office land uses.

7. *The use of a 5% reduction for transit share is not acceptable, as the ITE Trip Generation rates already take into account transit share.*

As determined by HDOT, the project's external trips were revised to remove the 5% transit share reduction because the ITE Trip Generation Rates already take into account transit share.

8. *The Liloa Drive Extension (North/South Collector Road located of and parallel to Piilani Highway between Kaonoulu Street and Kanani Road) and the proposed North/South Collector Road (located Mauka of Piilani Highway to provide direct access to Mokulele Highway) shall not be included in any analysis. Neither project is listed in the Statewide Transportation Improvement Program and is not committed.*

Liloa Drive from Waipuiani Road to Lokelani School is already built. According to the Maui County 2013 Capital Improvement Program budget approved by the Maui County Council, the North South Collector Road (makai collector) is budgeted from fiscal year 2015 to 2018 at a cost of \$18.2 million with two phases. (See: Attachment 1) Phase 1 will be the segment from Kaonoulu Street to Waipuiani Road and Phase 2 will be the segment from Lokelani School to Kanani Road. The County DPW, HDOT Maui, and the applicant held a meeting on this subject on October 16, 2012. At that meeting the Director of Public Works said that the Mayor and his administration support construction of the roadway. (See: Attachment 2) Based on the above evidence, we believe the Liloa Drive Extension is committed by the County and will be placed in the future Statewide Transportation Improvement Program (STIP). Liloa Drive would provide additional mobility throughout the Kihei area and is necessary to divert traffic from Piilani Highway. For the purpose of this study, it is assumed that the Liloa Drive would be complete between Kaonoulu Street and Kanani Road.

Further clarifying information regarding the mauka collector roadway is provided below. The roadway is not included in the current STIP, as it is not anticipated to be necessary for many years. However, the community and county government have carefully planned for and considered the eventual need for the road. Maui County strongly supports an interconnected Kihei mauka transportation network as shown in the attached August 13, 2012 letter. (See: Attachment 3) A North South roadway mauka of Piilani Highway, to be constructed as growth in the region warrants, is also identified as being supported in the 1998 Kihei-Makena Community Plan.

The MRTTP project is located within the Maui Island Plan urban growth boundary, and is sited within an area of directed growth adjacent to existing development and required infrastructure. The Plan further identifies MRTTP as an important employment center and states that infrastructure improvements, including roads, will be prioritized and allocated to directed growth areas, such as MRTTP.

The Maui Island Plan also contemplates a future north south roadway in several sections. (See: Attachment 4) The Plan's directed growth chapter description of the MRTTP states "the build-out of MRTTP should be coordinated with the development of the neighboring Kihei Mauka planned growth area to ensure efficient intra- and inter-regional transportation connectivity for both motorized and non-motorized transportation". Similar directions are included in the project descriptions of Kihei Mauka and the North Kihei residential planned growth areas located to the north of MRTTP. The Applicant has initiated discussions with other landowners about providing a continuous in-tract mauka collector roadway as directed by the Maui Island Plan. When available, records of these discussions will be furnished for HDOT's information.

In addition to the documents above, community testimony in support of an interconnected mauka transportation corridor has been provided to the Regional Long Range Land Transportation Plan project for Maui, and additional testimony will be provided in favor of the concept when the draft plan is circulated.

9. *The TIAR shall provide analysis for year 2024 and year 2034 traffic conditions "without the project" and "with the project" and including only committed roadway projects assumed to be in place. Under this scenario, the Liloa Drive Extension North/South Collector Road Makai of and parallel to Piilani Highway and the proposed North/South Collector Road Mauka of Piilani Highway should not be included in the analysis.*

We believe the Liloa Drive Extension is committed by the County and will be placed in the future STIP. The Applicant is willing to continue to coordinate with the HDOT, the County, and other developers in the region to contribute their fair share on the Mauka Collector Road.

10. *LOS "D" or better shall be required for all movements along Piilani Highway at the intersections with Lipoa Parkway, Ho'okena Street, and Old East Welakahao Road, with the project and with transportation mitigation.*

Overall LOS is a more comprehensive measurement of effectiveness at an intersection. Mitigation measures are recommended at Piilani Highway intersections that are projected to operate at worse than overall intersection LOS D.

11. The study intersections shall include all intersections along Piilani Highway where traffic is projected to increase by 5% or more with the project.

The Kaonoulu and Kulanihakoi intersections along Piilani Highway were added to the study area as required by the HDOT because these intersections are where traffic is projected to increase by 5% or more with the project.

12. The TIAR shall provide a schedule of phases and timing of recommended mitigative transportation improvements of each respective phase and development thresholds to guide implementation of mitigative measures.

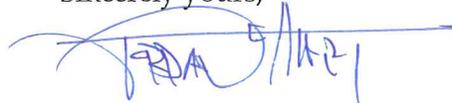
The development of the MRTP will occur in two phases ending in 2024 and 2034. The phased mitigative transportation improvements for each phase are provided in the revised TIAR. The Applicant will work with HDOT throughout the EIS and zoning processes to update the phases and timing of recommended mitigation improvements accordingly in the updated traffic study.

13. Recommendations for mitigation shall also include the Applicants fair share contribution to the cost of regional improvements to State highways and/or traffic mitigation measures that will help to alleviate the transportation impacts generated by the project, as determined by the Applicant and DOT.

MRTP has initiated discussions with other landowners about providing a continuous in-tract mauka collector roadway as directed by the Maui Island Plan. MRTP is willing to work with other land owners located mauka of Piilani Highway to coordinate on Mauka collector cost sharing and alignment.

Thank you again for providing us with your comments. Please feel free to call me or Mr. Brett Davis at (808) 242-1955 should you have any questions.

Sincerely yours,



Jordan E. Hart, President

ENCLOSURE

CC. Mr. Steve Perkins, Pacific Rim Land, Inc.
Project File 08-132

Public Works

Capital Improvement Program

Project Name: North-South Collector Road

CBS No: CBS-1064

Department: Department of Public Works

District: Kihei-Makena

Project Type: Road Improvements

Anticipated Life: 30 years

| Prior Years Expend/Encb | Current Appr FY 2012 | Ensuing FY 2013 | Subsequent Years | | | | | Total 6-Year |
|----------------------------|-------------------------|--------------------|------------------|---------|---------|-----------|-----------|-----------------|
| | | | FY 2014 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | |
| 0 | 0 | 0 | 0 | 800,000 | 800,000 | 8,300,000 | 8,300,000 | 18,200,000 |

PROJECT DESCRIPTION

To construct two roadway segments of the North/South Collector road. Phase I will be the segment from Kaonoulu Street to Waipuilani Road and Phase II, Lokelani School to Kanani Road. Funding request sequence as follows: Phase I: FY 2015 - Design and Environmental Assessment, FY 2017 - Construction phase. Phase II: FY 2016 - Design and Environmental Assessment, FY 2018 - Construction phase.

PROJECT JUSTIFICATION

Project necessary to alleviate traffic congestion for vehicular travel in the North-South direction in South Maui. Traffic on South Kihei road is already gridlocked in morning and afternoon peak hours. Future development in the Kihei-Makena areas will add to the congestion South Maui residents are already experiencing.

STRATEGIC PLAN ALIGNMENT

Department's Strategic Plan

Countywide Priority Results

Goal #3: Identify and resolve traffic congestion, circulation and safety issues.
Objective 3.1: Address capacity and circulation issues by installing additional lanes, acceleration/deceleration lanes, install traffic control devices at major intersections and creation of new roadway systems.

A Suitable Public Infrastructure
A Strong, Diversified Economy
A Prepared, Safe, and Liveable County
A Healthy and Sustainable Community

Operating Impact Narrative

No significant impact on staffing or operations anticipated.

FUNDING DETAILS

| Phase Description | Fund Code | Current Appr | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | FY 2018 |
|-------------------|-----------|--------------|---------|---------|---------|---------|-----------|-----------|
| Design | GB | 0 | 0 | 0 | 800,000 | 800,000 | 0 | 0 |
| New Construction | FD | 0 | 0 | 0 | 0 | 0 | 6,000,000 | 6,000,000 |
| New Construction | GB | 0 | 0 | 0 | 0 | 0 | 1,500,000 | 1,500,000 |
| Other | GB | 0 | 0 | 0 | 0 | 0 | 800,000 | 800,000 |

Schedule of Activities

| Activity | Start | End | Amount |
|---------------------------------|------------|------------|------------|
| Design | 07/01/2014 | 07/31/2016 | 1,600,000 |
| New Construction | 10/01/2016 | 02/28/2017 | 15,000,000 |
| Other | 10/01/2016 | 02/28/2017 | 1,600,000 |
| Total Capital Project Costs | | | 18,200,000 |
| Total O&M Costs | | | 0 |
| Total Capital & Operating Costs | | | 18,200,000 |

| Methods of Financing (Ensuing + 5 Years) | |
|---|-------------------|
| Funding Source | Amount |
| Federal Fund | 12,000,000 |
| General Obligation Fund | 6,200,000 |
| Total Funding Requirements | 18,200,000 |

Maui Research and Technology Park Meeting Minutes

Date 10-16-2012

Time: 130-245PM HST

Topic: DOT Comment Letter on the Draft EIS/ TIAR

Attendance:

DPW: David Goode/ Rowena Dagdag-Andaya/ Nolly Yagin

DOT Maui HW: Fred Cajigal/ Charlene Shibuya

MRTP: Steve Perkins

CH&P: Chris Hart/Jennifer Maydan/ Brett Davis

- Maui Public Works and State DOT Maui Highways both agree that it is not a matter of "if" the N-S Collector road will be developed, it is a matter of "when". There are many details involved, but eventually the road will be built. Best guess on timeline is 5-7 years. During that time Public Works will have to go through the environmental assessment and Special Management Area permitting process, which will include public comments. We agreed to engage in the process and advocate for the roadway at public hearings, with community groups, etc to help expedite the development of the remaining segments of the N/S collector road. David Goode noted that the Mayor is in support of the N/S collector road.
- Public works and Maui officials from Hawaii DOT supported our idea of an in-tract north south transportation network mauka of Piilani Highway. We introduced them to the concept that MRTP was building nearly a mile and a half of a N/S roadway that could be used as a mauka collector road to provide relief from Piilani Highway.
- The process of adding the roadways to the state's planning documents begins with the long-term transportation plan. We will make sure the necessary roadways are in that document, and later make sure they are advocated for inclusion in the STIP. The plan will come out in early 2013. After this plan is released, the Dept. of Public Works should start working on the south Maui regional traffic study. We pointed out to them that they had more money allocated to the study than they thought, so we'll follow up on this to make sure it stays top of mind.
- We have all the info needed from public works in preparation for our 10/29 meeting with Hawaii DOT in Honolulu.

ALAN M. ARAKAWA
Mayor

WILLIAM R. SPENCE
Director

MICHELE CHOUTEAU McLEAN
Deputy Director



RECEIVED

AUG 14 2012

CHRIS HART & PARTNERS, INC.
Landscape Architecture and Planning

cc: Brett
081132

COUNTY OF MAUI
DEPARTMENT OF PLANNING

August 13, 2012

Mr. Daniel E. Orodenker, Executive Director
State of Hawaii Land Use Commission
P.O. Box 2359
Honolulu, Hawaii 96804-2359

Dear Mr. Orodenker:

SUBJECT: DRAFT ENVIRONMENTAL IMPACT STATEMENT (EIS) FOR THE PROPOSED LAND USE DISTRICT BOUNDARY AMENDMENT (DBA) FOR THE MAUI RESEARCH & TECHNOLOGY PARK MASTER PLAN, AT KIHEI, MAUI, HAWAII; TMK(S): (2) 2-2-024:001-009; 014-018; 031; 032; 034; 036-046; AND (2) 2-2-002:054 (POR.) (EAC 2012/0013)

The Department of Planning (Department) is in receipt of the above-referenced document for the proposed petition to amend the land use boundary to effect a district reclassification of approximately 256.243 acres of land situated at Kihei, Maui, Hawaii, from the Agricultural District to the Urban District for the Maui Research & Technology Park. The Department understands the proposed action includes the following:

- The Applicant is Maui R&T Partners, LLC;
- The Applicant is requesting a Land Use DBA for a reclassification of approximately 256.243 acres of land from the Agricultural District to the Urban District and the land is identified by Tax Map Key (TMK) Parcel Nos. (2) 2-2-024:016 and 017 and a portion of (2) 2-2-002:054. Additionally, the project will require amendments to the conditions placed upon currently urbanized lands, comprising approximately 157.76 acres;
- The Approving Agency is the Land Use Commission of the State of Hawaii;
- The proposed project will require an amendment to the Kihei-Makena Community Plan (CPA) from Project District 6, Public/Quasi Public, and Agricultural to a District that better aligns with the Maui Research & Technology Park Master Plan strategic vision and changes of Maui County Code (MCC), Title 19.33 "Kihei Research & Technology Park District." The CPA will require approval by the Maui County Council;
- The proposed project will require a Maui County Change in Zoning (CIZ) in order to bring the entire Park site into the Research and Technology Park District, whereas portions of the Park are currently zoned Agricultural. The CIZ will require approval by the Maui County Council; and

- The CPA and anticipated "off-site" infrastructure work affecting State and County "rights-of-way" are "triggers" for the preparation of an EIS.

Based on the foregoing, the Department provides the following comments of the Draft EIS:

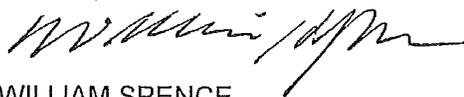
1. The Department concurs that the Petition to amend the land use district boundary of certain lands consisting of 256.243 acres from the Agricultural District to the Urban District is related to TMK Nos. (2) 2-2-024:016, and 017, and (2) 2-2-002:054 (POR.);
2. The Department concurs that the proposed CPA and anticipated use of State and County lands are "triggers" that require compliance with Chapter 343, Hawaii Revised Statutes (HRS);
3. The Department concurs that the State Land Use Commission shall be the Approving Agency for the EIS pursuant to Chapter 343, HRS;
4. On June 23, 2010, the Applicant filed a petition with the State Land Use Commission for a DBA from Agriculture to Urban for certain lands as identified;
5. The Applicant has filed a Consolidated Application for a CPA and CIZ for the Project which shall be reviewed by the Maui Planning Commission and Maui County Council;
6. The Draft EIS that looks at the Maui Research & Technology Park Master Plan Update as a whole shall include Transportation Demand Management Measures along with a Traffic Impact and Analysis Report (TIAR) for the project which shall seek to reduce or mitigate traffic impacts. Applicable and relevant updates to these reports should be provided on a timely basis at project milestones as changes in the timing and project scope may occur over the duration of the project;
7. The Draft EIS that looks at the Maui Research & Technology Park Master Plan Update as a whole shall state how the project will provide affordable housing in accordance with the County's Workforce Housing Policy as applicable and require that the Applicant coordinate with the Department of Housing and Human Concerns an appropriate affordable housing program per Maui County requirements;
8. The Department strongly recommends that this project as a whole be reviewed by the Maui County Urban Design Review Board (UDRB) to allow for a discussion of project design as it will include residential, civic, and commercial mixed-use components, along with areas of open space and parks. Review by

the UDRB may involve multiple meetings due to the scope and complexity of this project;

9. The County of Maui is currently reviewing the Draft Maui Island Plan that proposes a Directed Growth Strategy to establish urban growth boundaries and the land area under review for this Petition for a DBA from the Agricultural District to the Urban District is within the proposed urban growth boundaries of the Draft Maui Island Plan. Please include a map of the Draft Maui Island Plan Kihei-Makena growth area boundary and include the location of the Maui Research & Technology Park site; and
10. The Department concurs that the location and timing of a Kihei-Mauka North-South Collector Road is an unresolved issue as the schedule for the development of this roadway is uncertain at this time. In order to create an interconnected Kihei-Mauka transportation network in advance of the potential development of a Kihei-Mauka Collector Road, the Department strongly recommends that the Applicant consider designating and designing Ninau Street as a "complete street" with on street dedicated bicycle lanes, pedestrian facilities, median and through travel lanes, that would connect with North-South roadways of adjacent future development mauka of Pi'ilani Highway.

Thank you for the opportunity to comment. Should you require further clarification, please contact Staff Planner Kurt Wollenhaupt at kurt.wollenhaupt@mauicounty.gov or at (808) 270-1789; Staff Planner Kathleen Kern of the Long Range Division at kathleen.kern@mauicounty.gov or at (808) 270-7841; or Staff Planner Paul Critchlow of the Zoning Administration and Enforcement Division at paul.critchlow@mauicounty.gov or at (808) 270-5795.

Sincerely,



WILLIAM SPENCE
Planning Director

xc: Clayton I. Yoshida, AICP, Planning Program Administrator (PDF)
Aaron H. Shinmoto, PE, Planning Program Administrator (PDF)
John F. Summers, Planning Program Administrator (PDF)
Kathleen Kern, Staff Planner (PDF)
Paul B. Critchlow, Staff Planner (PDF)
Kurt F. Wollenhaupt, Staff Planner (PDF)
Brett Davis, Chris Hart & Partners, Inc.
Project File
General File

WRS:KFW:cr

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APPENDICES



APPENDIX A
Maui County Code, Chapter 19.33

Chapter 19.33 - KIHEI RESEARCH AND TECHNOLOGY PARK DISTRICT

Sections:

- [19.33.010 - Purpose.](#)
- [19.33.020 - Definitions.](#)
- [19.33.030 - Permitted uses.](#)
- [19.33.040 - Area regulations.](#)
- [19.33.050 - Height regulations.](#)
- [19.33.060 - Yard setbacks.](#)
- [19.33.070 - Building coverage.](#)
- [19.33.080 - Performance standards.](#)
- [19.33.090 - Environmental controls.](#)
- [19.33.100 - Research and technology park coordinator.](#)
- [19.33.110 - Technical review committee.](#)
- [19.33.120 - Procedure for subdivision.](#)
- [19.33.130 - Procedure for securing building and site improvement permits.](#)
- [19.33.140 - Improvement district program for the construction of off-site improvements.](#)
- [19.33.150 - Limitation.](#)

19.33.010 - Purpose.

The intent of this chapter is to provide for the establishment of a research and technology park district pursuant to the findings and recommendations of the general plan and the Kihei-Makena community plan as specified in Chapter 2.80 of this code and Ordinance No. 1490, Bill No. 95 (1984).

(Ord. 1541 § 1 (part), 1986)

19.33.020 - Definitions.

Whenever used in this chapter, unless a different meaning clearly appears from the context:

- A. "Application" means a formal request filed by an owner or lessee pursuant to the provisions of this chapter.
- B. "Association" means a group of owners of lots in the research and technology park district (other than the association itself in its capacity as owner of the common area) formed for the purposes set forth in protective covenants, conditions and restrictions.
- C. "CC&Rs" means a document listing protective covenants, conditions and restrictions, which shall be recorded with the Bureau of Conveyances of the state of Hawaii, and apply to the research and technology park and to each lot within the research and technology park district.
- D. "Committee" means the research and technology park technical review committee hereinafter established.
- E. "Design guidelines" means those detailed architectural, engineering, landscaping and/or other design related standards to be applied in the development of a research and technology

park which shall be consistent with the performance standards specified herein.

F. "Enforcing agency" means the fire chief of the department of fire control of the county of Maui or such other person or agency designated by the mayor of the county of Maui.

G. "Hazardous materials management plan" or "HMMP" means a document prepared and filed in accordance with Sections 19.33.090 and 19.33.130 of this chapter.

H. "Lessee" means a person holding land situate in the county of Maui pursuant to a recorded lease under which the unexpired remaining term is not less than five years at the time of filing of an application hereunder.

I. "Occupant" means a person holding record fee simple or leasehold title to land situate in the county of Maui and who has legal occupancy in the property in the research and technology park district.

J. "Owner" means a person holding record fee simple or leasehold title to land situate in the county of Maui.

K. "Planning commission" means the planning commission of the county of Maui.

L. "Planning director" means the director of the department of planning of the county of Maui; also referred to as the "coordinator" pursuant to the provisions of this chapter.

M. "Public works director" means the director of the department of public works of the county of Maui.

N. "Research and technology park district" or "research and technology park" or "R&T park" means land specifically designated and zoned for the permitted uses set forth hereinafter in Section 19.33.030 of this chapter.

O. "Uncontrolled discharge" or "uncontrolled release" means any leak, spill or dumping of hazardous materials resulting by accident, any malicious action, or any malfunction, breakdown or circumstance that cannot otherwise be reasonably predicted or prevented by human, mechanical or structural means.

P. "Urban design review board" means the agency established under Article II, Special Management Area Rules and Regulations of the planning commission of the county of Maui adopted pursuant to Chapter 205A, Hawaii Revised Statutes.

(Ord. 1541 § 1 (part), 1986)

19.33.030 - Permitted uses.

The following uses shall be permitted within the research and technology park district:

- A. Research laboratories and facilities, developmental laboratories and facilities and testing laboratories and facilities;
- B. Manufacture, assembly, testing and repair of components, devices, equipment and systems of an electrical, electronic or electromechanical nature;
- C. Manufacture, testing, repair and assembly of optical devices, equipment and systems;

- D. Manufacture, testing, repair and assembly of testing equipment;
- E. Pharmaceutical, biological, medical and agricultural research and production facilities;
- F. Administrative offices, distribution and warehouse facilities as may be required to support the permitted uses under this section;
- G. Other uses of similar and/or supporting service character may be permitted (e.g., banks, fitness centers, classroom and meeting facilities, restaurants and other support facilities or services catering primarily to the needs of visitors or employees of the R & T park), subject to approval by the planning commission and findings that such uses are consistent with the policies of the Kihei community plan.

(Ord. 1541 § 1 (part), 1986)

19.33.040 - Area regulations.

Within the R & T park, the minimum lot area shall be two acres and the minimum lot frontage shall be two hundred fifty feet, except for lots fronting on a cul-de-sac where the minimum frontage requirement is equal to one-third the outside circumference of the cul-de-sac bulb.

(Ord. 1541 § 1 (part), 1986)

19.33.050 - Height regulations.

The maximum height of any building shall be limited to three stories and shall not exceed forty feet.

(Ord. 1541 § 1 (part), 1986)

19.33.060 - Yard setbacks.

The yard spacing for buildings shall be as follows:

- A. Setbacks from parkway, arterial or collector streets: a sixty-foot building setback shall be provided from the right-of-way which includes at least a twenty-five-foot landscaped setback between parking area and a public right-of-way.
- B. Front yard setbacks from other than parkway, arterial or collector streets: a forty-foot building setback shall be provided from the right-of-way which includes at least a twenty-foot landscaped setback between parking area and a public right-of-way.
- C. Side yard setback: a forty-foot building setback shall be provided from side property lines of which ten feet is to be landscaped, buffering circulation, storage and parking areas from side property lines.
- D. Rear yard setback: a forty-foot building setback shall be provided from rear property lines of which ten feet is to be landscaped buffering circulation, storage and parking areas from rear property lines.

(Ord. 1541 § 1 (part), 1986)

19.33.070 - Building coverage.

The maximum site area covered by structures shall not exceed thirty-five percent of the total lot area.

(Ord. 1541 § 1 (part), 1986)

19.33.080 - Performance standards.

All building construction, alterations and site improvements shall be prepared, reviewed and approved in accordance with the design guidelines as approved by the public works director, and in accordance with Section 19.33.120 and the following standards:

A. Building. The general objective of these standards is to encourage quality architectural and landscape architectural design of all facilities to be constructed within the research and technology park.

1. All buildings shall be designed to be an integral part of the overall site design concept as presented in the design guidelines.
2. Building design should address the following: views and vistas; solar orientation and climate control; orientation toward major streets and thoroughfares; the character of neighboring development; and energy conservation.
3. Design features shall include the following: an entrance drive; landscaped visitor parking areas; visitor entrance and entry plazas; pedestrian plazas and walkways; atriums and interior courts; building and roof forms.

B. Landscape Planting. A comprehensive landscape planting and irrigation plan shall be prepared for all developments in the research and technology park district. The plan shall be subject to the approval of the planning director.

Each development shall be buffered by landscaped areas, as follows:

1. From a parkway, arterial or collector street right-of-way, a twenty-five foot wide landscaped area shall be provided between the parking area and the public right-of-way;
2. Along the front yard of a property other than that located on a parkway, arterial or collector street, a twenty foot wide landscaped area shall be provided between the parking area and the public right-of-way;
3. Along the side yard of a property, a ten foot wide landscaped area shall be provided; and
4. Along the rear yard of a property, a ten foot wide landscaped area shall be provided.

The streetscape and project landscape shall be maintained by the project occupant(s) individually or collectively through a landowner's association.

C. Parking Requirements. No parking shall be permitted on the internal streets or fronting half streets of the park. Each development shall provide off-street parking facilities in accordance with the requirements of Chapter 19.36, Off-Street Parking and Loading, of the Maui County Code as it relates to industrial or storage uses in the M-1 and M-2 industrial zones, or as may be otherwise

provided for in Chapter 19.36. Each development shall incorporate the following:

1. All parking shall be screened from public roads by earthen mounding and/or heavy landscaping.
2. Parking areas shall be integrated with the project's on-site pedestrian circulation system.
3. Parking areas shall not be permitted on the street side of a structure, except for areas designated as visitor, handicapped or preferential parking.

D. Signage for the park and the individual parcel users therein shall conform to the requirements of Chapter 16.12, Outdoor Signs, except for the following provisions:

1. General research and technology park identification signs at the entry location shall be coordinated with the master landscape planting plan and appropriately sized and illuminated to clearly denote the project name for the passing motorists entering the project.
2. The name of each business or parcel user in the research and technology park shall be clearly displayed and individually associated with its facilities when viewed from the street. The user's sign shall display the name and/or symbol of the business only.
3. There may be one freestanding parcel user sign for each individual parcel's public street frontage. If the property frontage exceeds three hundred feet, an additional sign shall be allowed.
4. Detached business identification signs shall not exceed thirty-two square feet on each side, and no freestanding sign shall exceed four feet in height unless approved by the urban design review board.
5. Building identification signs shall be limited to displaying the building name or the name of the business occupying the site. Building signs may be mounted to any vertical surface of a building or building-related wall providing such signs appear as an integral part of the architectural concept.
6. A comprehensive signage plan in conformance with the design guidelines shall be submitted to the urban design review board for review and recommendation to the public works director, who shall approve, approve with conditions or disapprove the comprehensive signage plan.

E. On-site Storage and Loading.

1. Unless otherwise approved by the public works director, no materials, supplies or equipment, including trucks and other motor vehicles, shall be stored upon a site except inside a closed building or in an enclosed area.
2. Provisions shall be made on each site for any necessary vehicle loading or unloading.
3. No on-street vehicle loading or unloading shall be permitted.

F. Screening fences and walls may be permitted by the public works director, in accordance with the approved design guidelines.

G. Access and Driveway.

1. The location and design of access point(s) from public roadways and streets and internal driveways shall conform with requirements of the department of public works.
2. No direct access onto a state highway shall be permitted from individual lots of the research and technology park.
3. Landscaping shall be required at all entrances to the park.

H. Solid Waste Disposal. No refuse collection areas shall be permitted between a street and the front of the building.

I. Roof Equipment. Equipment pipes and ducts on roof tops shall be screened from view along adjacent public roadways or streets.

J. Utilities and Communication Devices.

1. All on-site utilities including, but not limited to, drainage systems, sewers, gas lines, waterlines and wires and conduits associated with street lighting, electrical power, telephone, and communication equipment shall be installed underground.
2. Antennas, towers or devices for transmission or reception of any signals or for energy generation shall be located and designed to be as unobtrusive as possible from neighboring lots and the public streets and shall be subject to approval by the public works director, following review and recommendation by the committee.
3. Lighting shall be required on all internal streets and within all parking lots in the research and technology park.

K. Grading.

1. All building pad elevations shall conform to the overall drainage program for the research and technology park project district.
2. Grading and drainage improvements shall be designed and constructed to minimize adverse dust and runoff impacts on adjacent and downslope properties.

L. Exterior Mechanical Equipment. All exterior components of electrical, plumbing, heating, cooling and ventilating systems should not be visible from adjoining streets, lots or buildings.

(Ord. 1541 § 1 (part), 1986)

19.33.090 - Environmental controls.

A. Notwithstanding any other provisions contained in this chapter, no use or activity shall be permitted on any lot or portion of a lot within the research and technology park district, unless conducted in such a manner as not to constitute a nuisance to persons or property situate upon any adjoining lots whether the lots are located within the R&T park or outside of the R&T park. Such prohibited uses shall include, but not be limited to, the following:

1. Any use, excluding reasonable construction activity, of a lot or building which emits dust, sweepings, dirt or cinders into the atmosphere, or discharges liquid or solid wastes or other matter

Title 19 - ZONING
Article II. - Comprehensive Zoning Provisions
Chapter 19.33 - KIHEI RESEARCH AND TECHNOLOGY PARK DISTRICT

into any stream, river, waterway, leaching pond, cesspool, injection well or drainage system which may adversely affect the health, safety, comfort of, or intended use of their property by persons within the area;

2. The discharge of waste or any substance or materials of any kind shall be in compliance with all applicable laws;
3. The escape or discharge of any fumes, odors, spray, mists, gases, vapors, steam, acids or other substance, toxic and nontoxic, into the atmosphere which discharge may be offensive, detrimental to the health, safety or welfare of any person or may interfere with the comfort of persons within the area or which may be harmful to property or vegetation;
4. The radiation or discharge of intense glare or heat, or electromagnetic, microwave, ultrasonic, laser or other radiation. Any operation producing intense glare or heat or such other radiation shall be performed only within an enclosed or screened area and then only in such manner that the glare, heat or radiation emitted will not be discernible from any point exterior to the site or lot upon which the operation is conducted;
5. The presence at any point outside of any lot plane of a sound pressure level of any machine, device or any combination of same, from any individual plant or operation or property, which exceeds a decibel level which causes discomfort or annoyance to adjoining properties or lots, and, in any event, a sound pressure level which exceeds that set forth in the design guidelines;
6. The vibration of ground which is perceptible without instruments at a point exterior to the lot which is the source of such vibration;
7. Excessive emissions of smoke, steam or particulate matter (other than emissions caused by compliance with environmental requirements or due to waste control equipment), and visible (outside any building) emissions of smoke or steam which exceed Ringleman No. 1 on the Ringleman Chart of the United States Bureau of Mines (including those arising from disposal of trash and waste materials);
8. Interference with radio, television or other telecommunication signals.

B. Enforcement, Control and Monitoring Requirements.

1. The enforcing agency with technical assistance from the public works director or representative(s) and the committee shall establish such conditions and procedures to control, enforce, limit and monitor any use or activity defined and identified in subsection A of this section and is empowered to promulgate such rules and regulations as shall be necessary to implement the provisions of this chapter. Further, the enforcing agency shall also seek other technical assistance, if appropriate, from federal, state and county agencies as it relates to its duties provided hereinabove.
2. An effluent monitoring system for determining pH and temperature as an indicator of potential hazardous material shall be installed at the point where a park's effluent enters the main sewer line. Such a system will be designed to monitor on a random, periodic basis and not less than daily. Whenever such devices are provided, they shall be connected to attention-getting visual and/or audible alarms. In addition, random sampling of the contents of the sewer line will be made on at least a monthly basis and analyzed by a private licensed laboratory with reports made to the public works director and the enforcing agency.

3. Monitoring wells shall be established to provide baseline water quality information throughout the park with a minimum of three wells per each one hundred acres. These wells are to be monitored on at least a monthly basis with a report summarizing the results submitted to the public works director and the enforcing agency.

C. Hazardous Materials Storage and Handling Guidelines. Guidelines for hazardous materials storage and handling are specified hereinbelow for the research and technology park which will apply to all lots within the district:

1. Part I—General.

a. Purpose. The purpose of these guidelines is to protect the groundwater resources of the state by preventing uncontrolled discharges of hazardous materials into the ground at the research and technology park.

b. Applicability. These guidelines apply to all owners, lessees and occupants of the research and technology park (R & T park) who engage in the handling, storage and disposal of hazardous materials at the R & T park.

c. Administration. These guidelines will be implemented and administered by the association of the R & T park. The association will retain a suitably qualified independent engineer, or chemist or other appropriate professional consultant, acceptable to the enforcing agency and in consultation with the committee, with expertise in hazardous materials handling, storage and disposal. The hazardous materials consultant will administer the procedural requirements of these guidelines and ensure that the substantive requirements of these guidelines are complied with. The hazardous materials consultant will be selected based upon experience, knowledge and expertise in the following areas: (i) federal, state and local regulation of hazardous materials; (ii) evaluation of alternative hazardous materials management and disposal strategies; (iii) health and environmental risk assessments; (iv) soil sampling and groundwater monitoring; (v) groundwater flow and contamination modeling; (vi) development of remedial action alternatives and plans; (vii) supervision or implementation of remedial action plans; (viii) facility inspections; and (ix) environmental audits. The association for good cause may remove the hazardous materials consultant on its own volition and shall remove the consultant at the request of the enforcing agency and in consultation with the committee. The hazardous materials consultant will be reimbursed through fees collected from owners, lessees and occupants engaged in hazardous materials storage, handling and disposal and will report to the association and the enforcing agency or other county agency, as so designated by the mayor of the county. The hazardous materials consultant will also provide technical information and assistance to the enforcing agency in terms of the development of rules and regulations, procedures, methods or programs to implement the provisions of Section 19.33.090, including, but not limited to, the following: recommended methods and criteria for evaluating an HMMP; recommended technical reference information; recommended procedures and methods for recordkeeping, monitoring, inspection, emergency cleanup and repair and handling and disposal of hazardous waste materials; a recommended training program for personnel of the enforcing agency and other county departments responsible for the implementation of this section; and recommended procedures for interagency consultation and/or coordination in the review and enforcement of an HMMP and in the handling of emergencies and conditions of noncompliance with applicable federal, state or county regulations or the provisions of this section.

- d. **Materials Regulated.**
 - i. **Controlled Materials.** The materials regulated by these guidelines will consist of all materials listed as hazardous or extremely hazardous by the state, materials listed by the U.S. Department of Transportation, 49 CFR 172.101, as amended, and the Federal Environmental Protection Agency, 40 CFR Part 302; any materials classified by the National Fire Protection Association (NFPA) as either a flammable liquid, a class II combustible liquid, or a class IIIA combustible liquid; and any materials regulated under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA).
 - ii. **Exempt Materials.** These regulations do not apply to the following materials:
 - (A) **Retail Products.** Hazardous materials when contained solely in consumer products packaged for distribution to, and use by, the general public; or commercial products used at the facility solely for janitorial or minor maintenance purposes;
 - (B) **Insignificant Quantities.** Hazardous materials in quantities demonstrated to the satisfaction of the association's hazardous materials consultant and the enforcing agency to not present a significant actual or potential hazard to public health, safety or welfare and in compliance with the requirements of the state, the U.S. Department of Transportation and the Federal Environmental Protection Agency and as specified in subsection Cldi of this section.
- 2. **Part II—Limitations on Operations and Activities.**
 - a. **Intent.** The intent of this subdivision is to limit the occupancy of the property to nonhigh water users who so not use a significant quantity and/or variety of hazardous materials and who do not discharge the water into the county sewer system.
 - b. **Limitations on Operation.** Owners, lessees and occupants who propose to engage in high water usage operations and processes requiring significant quantities and/or variety of hazardous materials according to state or Federal Environmental Protection Agency regulations will not be permitted to locate at the R&T park unless the user provides an acceptable recycling system approved by the county as provided in subdivision 3 of this subsection.
 - c. **Limitations on Quantities of Hazardous Materials.** At each manufacturing facility, the quantities of hazardous materials permitted to be present onsite at any given time will be limited to volumes which would not necessitate storage in underground tanks, except as set forth in subdivision 4bvii(B) of this subsection.
- 3. **Part III—Hazardous Materials Management Plan.**
 - a. **Intent.** The intent of this subdivision is to provide for the regulation of hazardous materials use by requiring the submittal of a hazardous materials management plan (HMMP) which demonstrates the safe storage, handling and disposal of all hazardous materials.
 - b. **Applicability.** All owners, lessees or occupants proposing to engage in the handling, storage and disposal of hazardous materials are required to submit an HMMP. This

requirement does not apply to exempt materials and quantities as provided in subdivision 1 of this subsection.

c. Contents of an HMMP. Prior to the construction of any buildings, structures or other improvement, owners, lessees and occupants intending to engage in the use of hazardous materials are to submit an HMMP as provided for in Section 19.33.130. The proposed HMMP shall include the following information:

i. General Facility Site Plan. The general facility site plan is to consist of a site plan drawn at a scale of one inch to twenty feet which shows the location of all buildings and structures, loading and outside storage areas, parking lots, internal roads, storm and sewer drains and adjacent land uses. Any other relevant information such as the location of wells, surface water bodies, floodplains and earthquake faults should also be shown on the site plan.

ii. Storage Facility Map. The storage facility map is to show the location of each hazardous materials storage facility including all interior and exterior storage facilities, access to such storage facilities, emergency equipment related to each storage facility, and the general purpose of the other areas in the manufacturing facility. The storage facility map shall also indicate the chemical abstract service registry numbers for those hazardous materials listed in 40 CFR 302.4.

The map and registry are intended to provide emergency response personnel with a summary of the key information that they may need on the scene in the event of an emergency.

For tanks, the storage facility map and registry are to indicate the hazardous material contained in the tank by general chemical name, and the capacity limit of the tank.

iii. Hazardous Material Inventory. The HMMP is to contain information on each hazardous material stored in a facility (aggregated over all such materials stored in one or more storage facilities) where the aggregate quantity throughout the facility is greater than five hundred pounds in weight for solids, greater than fifty-five gallons for liquids, or greater than two hundred cubic feet at standard temperature and pressure (STP) for compressed gases. The HMMP is to contain the aggregate quantity range stored at the facility of each hazardous material. The HMMP shall also include a carcinogen identification form which shall indicate the storage of any quantity of any carcinogen listed in the regulations of federal or state agencies. The enforcing agency shall promulgate rules and regulations to further specify provisions for information, public records, trade secrets, and other appropriate requirements.

iv. Separation of Materials. The HMMP is to contain a description of the methods to be utilized to ensure separation and protection of stored hazardous materials from factors which may cause fire or explosion, or the production of flammable, toxic or poisonous gas or the deterioration of the containments.

v. Monitoring Program. The HMMP is to contain a description and, where appropriate, a design diagram of the location, type and suitability of monitoring methods to be used in each storage facility containing hazardous materials.

vi. Inspections. The HMMP is to specify the frequency of inspections of storage

facilities which will be undertaken by the occupant, as specified in subdivision 5a of this subsection.

vii. Recordkeeping Forms. The HMMP is to contain an inspection check sheet or log to be held by the enforcing agency and by the occupant on the premises to be used in conjunction with routine inspections.

viii. Emergency Equipment and Personnel. The HMMP is to describe emergency equipment availability, testing and maintenance, and to identify the emergency response manager.

ix. Disposal. The HMMP is to include plans for disposal of any solid, liquid or gaseous hazardous material and waste demonstrating that disposal will be in accordance with the applicable laws. To the extent practicable, however, primary emphasis shall be placed on the recycling or reprocessing of any hazardous waste materials to minimize the need for disposal of these materials.

x. Recycling System. The HMMP is to include plans and specifications of any recycling system and a written description of the uses of the recycled water and types of materials to be recycled.

xi. Additional Information. Additional information may be required for the HMMP where such information is reasonably necessary to ensure against uncontrolled discharges of hazardous materials.

d. Authority, Amendment and Review. The enforcing agency shall approve the HMMP and adopt rules and regulations for the review and approval of the HMMP and amendment of an approved HMMP as it relates to any major changes or modifications thereof. An approved HMMP shall be reviewed periodically by the enforcing agency pursuant to its rules and regulations. In any event, the enforcing agency shall not approve an HMMP or a building and site improvement permit shall not be issued for a proposed project in the R & T park that requires more than the minimum quantity of controlled materials, as specified in Section 19.33.090(C) (1) (d), or any quantity of an identified carcinogen, until responsible personnel of the enforcing agency are trained to implement the provisions of this section.

4. Part IV—Storage and Containment Standards.

a. Intent. The intent of this subdivision is to specify standards for the proper storage and containment of hazardous materials with the objective of preventing uncontrolled discharges into the ground.

b. Storage and Containment Requirements. Primary and secondary levels of containment will be required for all storage facilities intended for the storage of hazardous materials, as specified below:

i. Primary Containment. This is the first level of containment, i.e., the inside portion of that container which comes into immediate contact on its inner surface with the hazardous materials being contained.

(A) All primary containment must be product-tight, i.e., impervious to the hazardous material which is contained, or is to be contained, so as to prevent

seepage of the hazardous material from the primary containment. To be product-tight, the container shall be made of a material that is not subject to physical or chemical deterioration by the hazardous material being contained.

ii. Secondary Containment. This is the level of containment external to and separate from the primary containment.

(A) All secondary containments are to be constructed of materials of sufficient thickness, density and composition so as not to be structurally weakened as a result of contact with the discharged hazardous materials and so as to be capable of containing hazardous materials discharged from a primary container for a period of time equal to or longer than the maximum anticipated time sufficient to allow recovery of the discharged hazardous material.

(B) In the case of an installation with one primary container, the secondary containment is to be large enough to contain at least one hundred ten percent of the volume of the primary container.

(C) In the case of a storage facility with multiple primary containers, the secondary container is to be large enough to contain one hundred fifty percent of the volume of the largest primary container placed in it, or ten percent of the aggregate internal volume of all primary containers in the storage facility, whichever is greater.

(D) If the storage facility is open to rainfall, then the secondary containment must be able to additionally accommodate the volume of a twenty-four-hour rainfall as determined by a twenty-five-year storm history.

iii. Separation of Materials. Materials that in combination may cause a fire or explosion, or the production of a flammable, toxic or poisonous gas, or the deterioration of a primary or secondary container, shall be separated in both the primary and secondary containment so as to avoid intermixing.

iv. Overfill Protection. Means of overfill protection, as determined by the enforcing agency, may be required for any primary container. This may be an overfill prevention device and/or an attention-getting high-level alarm.

v. Drainage System. Drainage of precipitation from within a storage facility containing hazardous materials shall be controlled in a manner so as to prevent hazardous materials from being discharged. No drainage system will be approved unless the flow of the drain can be controlled.

vi. Monitoring Capability. All storage facilities intended for the storage of hazardous materials are to be designed and constructed with a monitoring system capable of detecting whether the hazardous material stored in the primary containment has entered the secondary containment. Visual inspection of the primary containment is the preferred method; however, other means of monitoring may be required. Whenever monitoring devices are provided, they shall, where applicable, be connected to attention-getting visual and/or audible alarms.

vii. Underground Storage.

(A) In order to prevent uncontrolled discharge from underground storage of hazardous materials, underground hazardous material storage tanks will not be permitted at the R&T park.

(B) The general prohibition against underground storage tanks does not apply to gasoline tanks installed in conjunction with gasoline sales establishments. Such underground gasoline tanks are subject to the storage and containment requirements set forth above; the requirements for secondary containment and monitoring require particular emphasis. Since the secondary containment of underground tanks may be subject to intrusion by water, a means for monitoring for such water infiltration is to be provided.

viii. Screening of Outside Storage Facilities. Outdoor storage facilities are to be screened from external view and properly secured from unauthorized entry in the manner prescribed by performance standards and other design guidelines for the R & T park.

5. Part V—Inspection and Repair.

a. Inspections by Occupant. Every occupant subject to these guidelines is to provide testing, monitoring and inspections in compliance with the hazardous materials management plan and to maintain records adequate to demonstrate compliance therewith. Such inspections shall be undertaken by a qualified independent engineer, or chemist or appropriate professional consultant acceptable to the association and the enforcing agency. Such inspector may not also be the consultant retained by the association for the purpose of administering these guidelines.

b. Inspections by the Association. The association may conduct inspections, at its discretion, for the purpose of ascertaining compliance with these guidelines. Upon the discovery of any noncompliance, the association shall notify the enforcing agency which shall cause to be corrected any conditions which would constitute any violation of these guidelines or of any other statute, code, rule or regulation affecting the storage of hazardous materials.

c. Inspections by the Enforcing Agency. The enforcing agency shall conduct inspections for the purpose of ascertaining compliance with these guidelines on at least an annual basis or more frequently, if determined to be necessary.

d. Right-of-Entry. Whenever necessary for the purpose of investigating or enforcing the provisions of these guidelines, or whenever any duly authorized enforcement officer of a federal, state or county agency has reasonable cause to believe that there exists in any structure or upon any premises any conditions which constitute a violation of these guidelines, the officer may enter such structure or premises at all reasonable times to inspect the same.

e. Remedial Action. Whenever the enforcement officer finds an instance of noncompliance with the approved HMMP or with these guidelines, the occupant responsible will have ten days to remedy the noncompliance, make any modifications or repairs as required by the enforcement officer and implement appropriate cleanup actions of hazardous materials at the sole expense of the occupant. In addition, an enforcement officer may require an occupant to immediately cease any part of an operation, if determined to be necessary.

The owner's sale/purchase agreement or occupant's lease agreement for the R&T park shall contain specific provisions requiring the owner or occupant to comply with all laws relating to the storage and disposal of hazardous materials, including the provision of this subsection. The agreement shall specify the responsibility for fees and costs arising out of or in connection with the removal or cleanup of hazardous materials or repair, removal or replacement of equipment and storage facilities, in the case of noncompliance with the approved HMMP.

f. Routine Maintenance, Repair or Replacement.

i. The occupant will perform routine maintenance, upkeep and minor repairs in a careful and safe manner. No approvals by the association or the county will be required for such routine maintenance and upkeep.

ii. Any substantial modification or repair of a storage facility other than minor repairs or emergency repairs will require submittal and approval of an amended HMMP which shows such modifications in accordance with subdivision 3 of this subsection prior to the initiation of such work.

iii. The occupant may make emergency repairs to a storage facility in advance to seeking an additional approval whenever an immediate repair is required to prevent or contain an uncontrolled release or to protect the integrity of the containment. However, within five working days after such emergency repairs have been started, the occupant shall seek approval pursuant to subdivision 3 of this subsection by submitting drawings or other information adequate to describe the repairs to the coordinator.

6. Part VI—Emergencies.

a. Uncontrolled Discharge of Hazardous Materials. As soon as any person in charge of a storage facility or responsible for emergency response for a facility has knowledge of any confirmed or unconfirmed uncontrolled discharge of a hazardous material, such person shall take all necessary steps to ensure the discovery and containment and cleanup of such discharge and shall notify the association and the enforcing agency of the occurrence.

b. Cleanup Responsibility. Any occupant responsible for storing the hazardous material shall institute and complete all actions necessary to remedy the effects of any uncontrolled discharge, whether sudden or gradual and shall bear all such costs that are incurred thereof. The enforcing agency may undertake actions to remedy the effects of such uncontrolled discharge itself, if it is determined that it is reasonably necessary under the circumstances to do so. The responsible party shall be liable to reimburse the enforcing agency for all costs incurred in remedying the effects of such uncontrolled release.

c. Recording. The occurrence of each uncontrolled discharge of hazardous materials and response thereto shall be recorded in the monitoring records of the occupant.

d. Indemnification. The occupant shall indemnify, hold harmless and defend the association and/or the county against any claim, cause of action, disability, loss, liability, damage, cost of expense, howsoever arising, which occurs by reason of an uncontrolled discharge of hazardous material in connection with the occupant's operations.

e. Emergency Equipment. Emergency equipment shall be provided by the occupant which

is reasonable and appropriate for potential emergencies presented by the stored hazardous materials. Such equipment shall be regularly tested and adequately maintained.

f. Posting of Emergency Procedures. Simplified emergency procedures shall be posted conspicuously in locations where hazardous materials are stored.

7. Part VII—Miscellaneous.

a. Handling Hazardous Materials.

i. Dispensing and mixing of hazardous materials must not be done in such a manner as to risk an uncontrolled discharge.

ii. When hazardous materials are moved into or out of a storage facility, they shall remain in the travel path only for the time reasonably necessary to transport the hazardous material and such movement shall be in a manner which will preclude an uncontrolled discharge.

b. Disposal of Hazardous Waste Materials. All hazardous solid, liquid or gaseous waste materials shall be disposed of in a safe manner to preclude uncontrolled discharge and be stored in properly secured containers within onsite or off-site facilities, subject to approval by the enforcing agency and as specified in the approved HMMP.

c. Secured Facilities. Access to the storage facilities shall be secured by means of fences and/or locks. The access to the storage facilities shall be kept securely locked when unattended.

d. Out-of-Service Storage Facilities.

i. No storage facility shall be abandoned.

ii. Storage facilities which are temporarily out of service, and are intended to be returned to use, must continue to be monitored and inspected.

iii. Any storage facility which is not being monitored and inspected in accordance with these guidelines must be closed and/or removed by the occupant in a manner approved by the association.

8. Part VIII—Technical Assistance. The public works director or representative(s) and the committee shall provide technical assistance to the enforcing agency on all matters relating to this subsection. Further, the enforcing agency shall also seek other technical assistance, if appropriate, from federal, state and county agencies as it relates to the duties provided hereinabove.

(Ord. 1541 § 1 (part), 1986)

19.33.100 - Research and technology park coordinator.

The planning director shall coordinate the submittal and review of all applications relative to development of lands within the research and technology park district, including, but not limited to, zoning, subdivision, construction of improvements and building and site development. The planning director shall be responsible to facilitate the review process, and may establish time limitations and

procedures for review not inconsistent with the provisions of this chapter.

(Ord. 1541 § 1 (part), 1986)

19.33.110 - Technical review committee.

The committee shall consist of the managing director, director of planning, director of public works, director of water supply, fire chief, and any other representatives of county, state or federal agencies as designated from time to time by the coordinator. The committee shall be responsible for carrying out the duties enumerated in this chapter, as well as other duties which may be assigned by the coordinator.

(Ord. 1541 § 1 (part), 1986)

19.33.120 - Procedure for subdivision.

The owner or duly authorized agent of a parcel of land within the research and technology park district desiring to subdivide the parcel shall file an application in accordance with the following procedures:

A. Preliminary Subdivision Approval.

1. Application for preliminary subdivision approval shall be filed with the coordinator, and include the following information:

- a. A site plan showing vehicular traffic circulation and utility service systems;
- b. A preliminary subdivision plat map;
- c. A topographic map;
- d. A conceptual grading and drainage and erosion control plan;
- e. Design guidelines and CC&Rs, in accordance with Section 19.33.080
- f. Filing fee, in accordance with the Maui County Code;
- g. Other information, as may be required by the planning director.

2. The planning director shall review the application and determine whether it is complete. Within seven calendar days from the date of receipt of the application, the planning director shall refer the application to the committee and other appropriate government agencies for review and comment; or if the application is incomplete, shall return it to the applicant and specify the additional information required.

3. Within twenty calendar days from the receipt of a complete application, the coordinator shall forward the application, together with the recommendation of the committee for approval, approval with conditions, or disapproval, to the director of public works.

4. Within fifteen calendar days from the receipt of the application, the director of public works shall approve, approve with conditions, or disapprove the application for preliminary subdivision approval.

5. Unless otherwise specifically provided for by law, the general provisions of Title 18 of this code relating to subdivisions, shall apply, consistent with the time requirements provided

herein.

B. Construction Plan Approval. Any application for approval of construction plans in conjunction with a subdivision having received preliminary approval as provided for in subsection A of this section, shall be submitted to the coordinator in accordance with Section 19.33.130.

C. Final Subdivision Approval. All applications for final subdivision approval shall be submitted to the coordinator for review and processing. Within fifteen calendar days, the coordinator shall forward the application to the public works director, together with a recommendation for approval or disapproval. The public works director shall approve or disapprove the request for final subdivision approval within ten calendar days from the receipt of the application.

(Ord. 1541 § 1 (part), 1986)

19.33.130 - Procedure for securing building and site improvement permits.

The owner or lessee of a lot within the research and technology park district, desiring to construct any improvements, or to build, replace, enlarge or modify new or existing structures, where such construction, building, replacement enlargement or modification requires a building, plumbing, electrical or any other type of a permit or approval, shall file an application for such permit or approval with the coordinator.

A. Application Requirements. The application shall contain the following information:

1. A final subdivision plat map, if applicable;
2. A specific development plan, which incorporates the approved design guidelines and also includes, where applicable and required by the coordinator, the following information:
 - a. A detailed drainage, grading and soil erosion report and plans,
 - b. Landscape planting plan,
 - c. Signage plan,
 - d. Building plans and specifications,
 - e. Solid and liquid waste disposal plan,
 - f. Parking and circulation plans,
 - g. If applicable, a hazardous materials management plan, as specified in Section 19.33.090C,
 - h. If applicable, technical plans, specifications, monitoring procedures and other information for the effluent monitoring system and monitoring wells, as specified in Section 19.33.090B,
 - i. Other pertinent information necessary for permit approval;
3. If required, permit fees, in accordance with this code.

B. Procedure.

Title 19 - ZONING
Article II. - Comprehensive Zoning Provisions
Chapter 19.33 - KIHEI RESEARCH AND TECHNOLOGY PARK DISTRICT

1. The coordinator shall review the application and determine whether it is complete. Within seven calendar days from the date of receipt of the application, the coordinator shall refer the application to the committee and, if appropriate, the urban design review board and other government agencies for review and comment; or if the application is incomplete, shall return it to the applicant and specify the additional information required.
2. Upon acceptance of an application for a proposed project within the R&T park requiring an HMMP, in accordance with Section 19.33.090C, the coordinator shall immediately publish notice in a newspaper with state-wide or Maui Island circulation to inform the public that such application has been received by the coordinator for processing.
3. Within twenty calendar days from the receipt of a complete application, the coordinator shall forward the application, together with the recommendation of the committee and other appropriate government agencies to the director of public works.
4. Within fifteen calendar days from the receipt of the application, the director of public works shall approve, approve with conditions, or disapprove the application for building or site improvement permit.

(Ord. 1541 § 1 (part), 1986)

19.33.140 - Improvement district program for the construction of off-site improvements.

The construction of off-site improvements for a research and technology park may be financed by improvement district bonds, based on a tax increment funding program or other instrument, in accordance with Title 14 Article 3, Improvement Districts, of this code.

(Ord. 1541 § 1 (part), 1986)

19.33.150 - Limitation.

If the county of Maui adopts an ordinance for county-wide application dealing with hazardous materials storage and handling guidelines, then upon the effective date of such ordinance, part or all of Section 19.33.090C of this chapter may be rescinded; provided, however, that the county wide ordinance is not less restrictive than the provisions in this chapter.

(Ord. 1541 § 1 (part), 1986)



APPENDIX B
Environmental Site Assessment

MEV, LLC

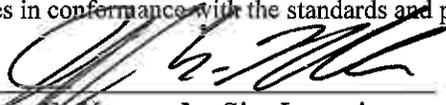
MALAMA ENVIRONMENTAL

Environmental Site Assessment: Phase I Investigation

Property: 370 ACRES - UNDEVELOPED LAND
(MAUI RESEARCH & TECHNOLOGY PARK)
KIHEI, MAUI, HAWAII, 96753
T.M.K. (2) 2-2-24:4, 8, 9, 14, 15, 16, 17 & 18
&
T.M.K. (2) 2-2-2: 54 (PORTION)

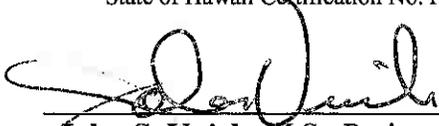
Prepared for: PACIFIC RIM LAND, INC.
381 HUKU LI'I PLACE
SUITE #202
KIHEI, HI 96753
ATTN: MR. JOHN MALONEY

We declare that, to the best of our professional knowledge and belief, we meet the definition of *Environmental professional* as defined in 312.10 of 40 CFR 312 and we have the specific qualifications based on education, training, and experience to assess a *property* of the nature, history, and setting of the *subject property*. We have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR part 312.


Jeffrey E. Kermode, Site Investigator

- Registered Environmental Assessor
Registration No. 08202 (State of California)
- Lead-Based Paint Risk Assessor
EPA Certification No. HI-R-6127-1
- Asbestos Building Inspector (AHERA Accredited Course)
State of Hawaii Certification No. HIASB-0351

5/16/07
Date


John S. Vuich, M.S., Project Supervisor

- Registered Environmental Assessor
Registration No. 1433 (State of California)

5/16/07
Date

Table of Contents

| | |
|--|-----------|
| TABLE OF CONTENTS | 1 |
| DISCLOSURE | 3 |
| EXECUTIVE SUMMARY | 4 |
| 1.0 INTRODUCTION | 7 |
| 1.1 PURPOSE..... | 7 |
| 1.2 DETAILED SCOPE OF SERVICES..... | 7 |
| 1.3 SIGNIFICANT ASSUMPTIONS..... | 7 |
| 1.4 LIMITATIONS AND EXCEPTIONS..... | 7 |
| 1.5 DATA GAPS..... | 8 |
| 1.6 SPECIAL TERMS AND CONDITIONS..... | 8 |
| 2.0 SITE AND REGIONAL DESCRIPTION | 9 |
| 2.0 SITE AND REGIONAL DESCRIPTION | 9 |
| 2.1 LOCATION AND LEGAL DESCRIPTION..... | 9 |
| 2.2 SITE AND VICINITY GENERAL CHARACTERISTICS..... | 9 |
| 2.3 DESCRIPTION OF STRUCTURES, ROADS, OTHER IMPROVEMENTS..... | 9 |
| 2.4 CURRENT USE OF THE PROPERTY..... | 9 |
| 2.5 CURRENT USES OF THE ADJOINING PROPERTIES..... | 10 |
| 3.0 USER PROVIDED INFORMATION | 11 |
| 4.0 RECORDS REVIEW | 12 |
| 4.1 STANDARD ENVIRONMENTAL RECORD SOURCES..... | 12 |
| 4.2 ADDITIONAL ENVIRONMENTAL RECORD SOURCES..... | 13 |
| 4.3 PHYSICAL SETTING SOURCE(S)..... | 16 |
| 4.4 HISTORICAL USE INFORMATION REGARDING THE PROPERTY AND ADJOINING PROPERTIES..... | 16 |
| 5.0 SITE RECONNAISSANCE | 18 |
| 5.1 METHODOLOGY AND LIMITING CONDITIONS..... | 18 |
| 5.2 GENERAL SITE SETTING..... | 18 |
| 5.2.1 <i>Current and Past Use(s) of the Property</i> | 18 |
| 5.2.2 <i>Current and Past Uses(s) of the Adjoining Properties and Surrounding Area</i> | 19 |
| 5.2.3 <i>Topography</i> | 19 |
| 5.2.4 <i>Geology and Soils</i> | 20 |
| 5.2.5 <i>Hydrology</i> | 20 |
| 5.2.6 <i>Hydrogeology</i> | 20 |
| 5.2.7 <i>Potable Water Supply and Sewage Disposal System</i> | 21 |
| 5.3 INTERIOR AND EXTERIOR OBSERVATIONS..... | 22 |
| 5.3.1 <i>Hazardous/Regulated Substances and Petroleum Products in Connection with Identified Uses</i> | 22 |
| 5.3.2 <i>Hazardous/Regulated Substances and Petroleum Products/Containers (not in connection with identified current uses)</i> | 22 |
| 5.3.3 <i>Unidentified Substance Containers</i> | 22 |
| 5.3.4 <i>Storage Tanks</i> | 22 |
| 5.3.5 <i>Odors</i> | 22 |
| 5.3.6 <i>Pools of Liquid</i> | 22 |
| 5.3.7 <i>Indications of PCBs</i> | 22 |

| | |
|---|-----------|
| 5.4 INTERIOR OBSERVATIONS | 23 |
| 5.5 EXTERIOR OBSERVATIONS | 23 |
| 5.5.1 Pits, Ponds, and Lagoons | 23 |
| 5.5.2 Stained Soil or Pavement | 23 |
| 5.5.3 Stressed Vegetation | 23 |
| 5.5.4 Solid Waste | 23 |
| 5.5.5 Wastewater or Storm Water – Discharge Drains, Dry Wells, Drainage Ways, and Retention Basins | 23 |
| 5.5.6 Wells | 24 |
| 5.5.7 Septic and Cesspool Systems | 24 |
| 5.6 NON-SCOPE CONSIDERATIONS | 24 |
| 5.6.1 Asbestos-Containing Materials (ACM) | 24 |
| 5.6.2 Lead-Based Paint | 24 |
| 5.6.3 Arsenic-Containing Substances | 24 |
| 5.6.4 Radon | 24 |
| 5.6.5 Lead in Drinking Water | 24 |
| 5.6.6 Ecological Resources, Endangered Species, Cultural and Historic Resources, and Wetlands | 24 |
| 5.6.7 Indoor Air Quality | 25 |
| 5.6.8 High Voltage Transmission Lines | 25 |
| 6.0 INTERVIEWS | 26 |
| 6.1 INTERVIEW WITH CLIENT REPRESENTATIVE | 26 |
| 6.2 INTERVIEW WITH PROPERTY OWNER REPRESENTATIVE | 26 |
| 6.3 OTHER PERSONS INTERVIEWED | 26 |
| 7.0 FINDINGS, OPINIONS, AND CONCLUSIONS | 27 |
| 7.1 RECOGNIZED ENVIRONMENTAL CONDITIONS | 27 |
| 7.1.1 Database Listings (See Section 4.0 & EDR Report, Appendix B) | 27 |
| 7.1.2 Current and Historic Use or Storage of Hazardous and Regulated Substances (See Sections 5.3.1 & 5.3.2) .. | 27 |
| 7.2 OTHER ENVIRONMENTAL CONCERNS | 27 |
| 7.2.1 Ineffective Storage of Regulated Waste and Limited Soil Staining (See Section 5.3.2 & 5.5.2) | 27 |
| 7.2.2 Solid Waste Management (See Section 5.5.4) | 28 |
| 7.2.3 Surface Waters and Area Aquifer Protection | 28 |
| 7.2.4 Groundwater Well (See Section 5.5.6) | 28 |
| 8.0 REFERENCES | 29 |
| 8.1 PUBLISHED REFERENCES | 29 |
| 8.2 MAP AND OTHER REFERENCES | 30 |
| 8.3 RECORD OF PERSONAL COMMUNICATIONS | 30 |
| APPENDIX A: | 31 |
| MAPS, PLANS, AND PHOTOGRAPHS | 31 |
| APPENDIX B: | 32 |
| REGULATORY RECORDS DOCUMENTATION | 32 |
| SITE SPECIFIC DOCUMENTATION | 32 |
| APPENDIX C: | 33 |
| QUALIFICATIONS OF ENVIRONMENTAL PROFESSIONALS | 33 |
| APPENDIX D: | 34 |
| ACRONYMS AND ABBREVIATIONS | 34 |

Disclosure

This document contains the results of services performed on this Project by **Malama Environmental (MEV, LLC)** pursuant to Agreement. The results represent the application of a variety of scientific and analytical disciplines that have been rendered using the standard of care, skill, and diligence normally provided by professionals in the performance of similar services under similar circumstances.

MEV assessments are intended to reduce, but not eliminate, uncertainty regarding recognized environmental conditions in connection with the Subject Site, as conducted within reasonable limits of time and cost. A general consensus of EPA's guidance on landowner liability is that *no environmental site assessment can wholly eliminate uncertainty regarding the potential for recognized environmental conditions in connection with a property.*

The use of this document and the results reported are limited to the services performed and areas examined as described in this document and no inferences are intended with respect to anything not described herein.

MEV is not responsible for conditions or consequences arising from relevant data, facts, and information that were concealed, missing, withheld, not fully disclosed, or not reasonably available at the time these services were performed. **MEV** is not responsible for any indirect, incidental, or consequential damages of any nature arising from any cause.

MEV has no beneficial economic interest in the Project other than as an independent professional organization performing the agreed services. **MEV's** warranties are as described above and there are no other warranties of any kind, expressed or implied, regarding the services.

Executive Summary

Introduction

This Phase I Environmental Site Assessment (ESA) has been prepared for Mr. John Maloney of Pacific Rim Land, Inc. and was conducted pursuant to Malama Environmental's (MEV's) written proposal and contract accepted by Mr. Maloney on March 15, 2007. This investigation and report format follows the guidelines of the American Society of Testing and Materials (ASTM) Publication E1527-05, which is recognized by 40 CFR Part 312 as an acceptable guidance document for satisfying the EPA's final "*All Appropriate Inquiries*" rule.

Site Description

The subject site is located in the community of Kihei, Maui, Hawaii. The land parcels are part of the Maui Research and Technology Park. The site consists of nine (9) parcels of land, irregular in shape, measuring approximately 370 acres in total area. The site is further described on the Tax Maps of the State of Hawaii as Division 2, Zone 2, Section 2, Plat 24, Parcels 4, 8, 9, 14, 15, 16 portion, 17 portion, 18 and Division 2, Zone 2, Section 2, Plat 2, Parcels 54 portion. The land parcels consist of undeveloped, grazing land and a roadway (Lipoa Parkway).

Records Review

The purpose of a records review is to obtain and review records that will help identify *recognized environmental conditions* in connection with the subject property. The services of Environmental Data Resources, Inc. were utilized to compile the database listings.

Our records review did not discover any current investigation of the subject site under any programs conducted by a federal, state, or local environmental agency.

One (1) risk site was identified in the vicinity of the subject property, however, MEV does not expect this site to negatively impact the environmental condition of the subject property.

Site Reconnaissance

A site investigation focuses on obtaining information indicating the likelihood of identifying physical *recognized environmental conditions* in connection with the property and assessing the subject property in relation to surrounding land uses and natural surface features. It includes a physical inspection of the real property and any on-site facilities.

On May 3 and May 4, 2007, MEV personnel, Mr. Jeffrey Kermode, conducted an overall site inspection of the subject site. Accessible areas of the property were visually and physically inspected.

The following are significant observations of field conditions:

- The land parcels predominantly consist of undeveloped grazing lands with no permanent building structures;
- Two (2) construction baseyards are located on-site;
- Approximately 2 gallons of waste oil was noted in an oil pan that requires management. Limited soil staining was related to this oil pan.
- A limited amount of solid waste dumping was evident including Special Waste that requires proper management;
- One (1) groundwater well is located on-site;
- One (1) small-scale sewer pump station is located on-site;
- The bulk storage/use of hazardous/regulated substances was not noted on-site.

Conclusions

Recognized environmental conditions, as defined by ASTM Standard E1527-05, are the presence or likely presence of any hazardous substance or petroleum products on a property under conditions that indicate an

existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property, or into the ground, ground water, or surface water of the property. **Recognized environmental conditions** are described with regard to (1) the nature and extent of the environmental condition, (2) potential or actual environmental threat, (3) potential for transport (migration) of any environmental conditions, and (4) consideration for further investigation. The term is not intended to include *de minimis* conditions that generally do not present a material risk of harm to public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.

MEV has performed this Phase I Environmental Site Assessment in conformance with the scope and limitations of the ASTM Practice E 1527-05 for the subject property, located within and surrounding the Maui Research and Technology Park, [TMK (2)-2-2-24:4, 8, 9, 14, 15, 16 portion, 17 portion, 18 & (2)-2-2-2:54 portion] in the community of Kihei, Maui, defined as the subject property. Any exceptions to or deletions from this practice are described in Section 1.4, Limitations and Exceptions, of this report.

This assessment has revealed no evidence of *recognized environmental conditions* in connection with the property.

- ***Database Listings***

The subject site is not listed. The listed, nearby risk site unlikely poses a significant concern to the subject property.

- ***Storage and Use of Hazardous and Regulated Substances***

There is no evidence of any historic or current significant misuse or spills of hazardous or regulated substances on the subject property.

*The concerns listed below may not be considered **recognized environmental conditions** by ASTM definition, however, they may be considered regulated under other environmental laws and ordinances and may present a potential liability to the property owner.*

- ***Ineffective Storage of Regulated Waste and Limited Surface Soil Staining***

A very limited amount of waste oil is being ineffectively stored beneath an office trailer (not in use) located on-site. This waste oil and any related surface soil staining should be properly managed. See Section 5.3.2 and 5.5.2.

- ***Solid Waste Management***

A limited amount of solid waste dumping activity was evident on the subject property. Regulated items requiring special management were noted.

- ***Surface Waters and Area Aquifer Protection***

For any future development activities planned for the subject property, the owner should be aware of the potential for contaminants to migrate into any nearby drainageways. Products of concern relating to any future development project or land-clearing activity would be earthen material (silt), paints, oils, antifreezes and other fluids from automobile or on-site machinery, or leaks from on-site stocked items.

- ***Groundwater Well***

One (1) groundwater well is located on the subject property. Department of Lands and Natural Resources' permitting requirements for Well No. 4426-03 were completed.

The conclusions stated above should not be construed to mean that any regulatory agency would have the same opinion as this author, nor is any implication proposed therefrom.

The results of this environmental assessment are intended for general reference purposes only and are not intended as legal advice. The advice of legal counsel should be sought in regard to individual facts, circumstances and interpretation of environmental liability.

Environmental Site Assessment

Phase I Investigation

1.0 INTRODUCTION

A Phase I Environmental Site Assessment (ESA) is conducted to determine if a site may be contaminated with hazardous or toxic substances or wastes resulting from current or past site activities, unauthorized dumping or disposal, or migration of contaminants from adjacent or nearby properties. Its goal is to identify *recognized environmental conditions* on a property that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products. These release conditions apply to structures on the property as well as the soil, groundwater, or surface water of the property. The American Society of Testing and Materials (ASTM) Standard 1527-05, Standard Practice for Environmental Site Assessments: Phase 1 Environmental Site Assessment Process, is used to "...define good commercial and customary practices for conducting an environmental site assessment of a parcel of commercial real estate".

1.1 Purpose

The study objectives are to characterize the environmental setting of the subject property, to identify any obvious activity of environmental concern that may have occurred at or near the site, and to evaluate potential migration pathways for any identified contaminants. It may also address any activities that affect future considerations for potential environmental impairment to the property.

Another function of this Phase I ESA is to conduct an *all appropriate environmental inquiry* in response to the federal Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980, the EPA's final rule (40 CFR Part 312), and similar state and local regulations. An ESA "all appropriate inquiry" may provide the buyer, receiver, or lender making a loan secured by the subject real property with a basis to qualify for the *innocent landowner, contiguous property owner, or bona fide prospective purchaser defense* should any legal action be initiated for environmental impairment to the property.

ASTM Publication E1527-05 is recognized by 40 CFR Part 312 as an acceptable guidance document for satisfying the EPA's final "*All Appropriate Inquiries*" rule.

1.2 Detailed Scope of Services

This Phase I Environmental Site Assessment (ESA) has been prepared for Mr. John Maloney of Pacific Rim Land, Inc. and was conducted pursuant to Malama Environmental's (MEV's) written proposal and contract accepted by Mr. Maloney on March 15, 2007.

There were no other additional services requested of MEV by the Client.

1.3 Significant Assumptions

The assessment of *recognized environmental conditions* relies on: 1) sources of actual knowledge, 2) thorough appropriate inquiry, 3) reviewing reasonably ascertainable documents and records, and 4) conducting a visual and olfactory reconnaissance. In conducting this ESA, MEV has relied on the truthfulness of its inquiry sources and the validity of reviewed records. If obvious indications or MEV actual knowledge contradicted the reported/reviewed information sources, it has been so stated in the appropriate sections of this report.

1.4 Limitations and Exceptions

The investigation performed for this report includes the components of an *all appropriate inquiry* regarding the potential for contamination to exist or have occurred at this site. This investigation is also the basis of an *all appropriate inquiry* into the presence or likely presence, release or threatened release, of hazardous

substances and petroleum products at this real property. This Phase I Environmental Site Assessment was prepared according to guidelines presented in the American Society of Testing and Materials Document entitled *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* (ASTM E-1527-05).

Since no ESA can eliminate uncertainty regarding the potential for *recognized environmental conditions* in connection with a property, the limiting intent of this investigation is to reduce the uncertainty to an appropriate level. Minimal requirements for the Phase I ESA include a review of historical records, a review of files and databases compiled by regulatory agencies, interviews with current owners and/or occupants of the property, and a field reconnaissance of the subject site and adjacent areas.

This ESA also takes into consideration the evaluation of other substances and products that are or may be interpreted as excluded under CERCLA. Commonly, these substances are of concern in commercial real estate transactions under current custom and usage and may include, but are not limited to, Radon, Lead-in-Drinking Water, and Special Environmental Resources. Where appropriate, MEV has considered environmental concerns of other federal, state, and local regulations.

Some database resources developed for Maui County are in their infancy or are not cross-referenced in a manner as to be readily discernible. The Maui County Fire Department maintains an electronic database that dates back to January 2000. Information and records prior to 2000 exist on file, as hardcopies, at the Department of Fire and Public Safety Office.

Databases and records utilized for this investigation were limited to those that are reasonably ascertainable; that is, they had to be publicly available, obtainable from its source within reasonable time and cost constraints, and practically reviewable with regard to volume, sorting, and organization. Additionally, the services of *Environmental Data Resources, Inc.* (EDR) were utilized to compile the environmental database listings. See Appendix B.

1.5 Data Gaps

MEV did not encounter any significant *data gaps* during the course of this Phase I ESA Investigation that would affect the ability of the *Environmental Professional* to identify *recognized environmental conditions* pertaining to the subject property. MEV did not receive requested historical/environmental information from one of the current landowners, Maui R & T Partners. See request letter, Appendix B.

1.6 Special Terms and Conditions

As a standard practice, a confidential client privilege was initiated by MEV for the work performed and contents of this report. MEV shall ensure that its officers, employees, agents, and independent contractors do not disclose this report or any information contained therein to any person without the proper knowledge and written consent from the Client (or as otherwise required by law). MEV shall ensure that each of its officers, employees, agents, and independent contractors understand and obey these requirements.

The information and opinions provided herein are intended as background data and planning guidance to interested parties. This should not be construed to mean that any regulatory agency would have the same opinion as MEV, nor is any implication proposed.

MEV has performed this study in a competent and professional manner. Since there may be hidden or unknown conditions that may be missed during this inspection, MEV cannot warrant the actual site conditions described in this report.

End of Section

2.0 SITE AND REGIONAL DESCRIPTION

Refer to Figure 1, Regional Setting Map, in Appendix A, for a depiction of the general setting of the subject site in relation to topographic features. Also depicted are the projected groundwater flows, regional surface water flows, and locations of other significant physical features or structures.

2.1 Location and Legal Description

The subject site is located within and adjacent to the Maui Research & Technology Park located off Lipoa Parkway in the community of Kihei, Maui, Hawaii. The site is further described on the Tax Maps of the State of Hawaii as Division 2, Zone 2, Section 2, Plat 24, Parcels 4, 8, 9, 14, 15, 16 portion, 17 portion, 18 and Division 2, Zone 2, Section 2, Plat 2, Parcels 54 portion. See Figure 3a/3b, Tax Maps, Appendix A.

2.2 Site and Vicinity General Characteristics

The site consists of nine (9) parcels of land, irregular in shape, measuring approximately 370 acres in total area. The site predominantly consists of undeveloped, grazing land and a roadway (Lipoa Parkway).

The coastal community of Kihei is situated on the western slopes of East Maui (Haleakala). The subject property is located above (mauka of) the Piilani Highway. See Figure 1, Appendix A.

Surrounding land use consists of undeveloped grazing lands, a golf course and commercial office buildings. See Figure 2, Appendix A.

2.3 Description of Structures, Roads, Other Improvements

The subject property consists predominantly of undeveloped grazing land. A limited network of unpaved and paved (poor condition) access roads exists on-site. MEV also noted rock walls that were likely related to historic livestock activities and boundary markers. Limited amounts of metal/wood fence enclosures were also noted on the grazing land.

Parcel 9 & 18 consist of Lipoa Parkway that provides access to the Maui Research and Technology Park from Piilani Highway. No substantial permanent structures are located on-site. A small shed is located on Parcel 16. A groundwater well and small-scale sewer pump station are located on Parcel 16. See Figure 2, Appendix A.

2.4 Current Use of the Property

As noted above, the subject property predominantly consists of undeveloped grazing land. A construction baseyard (office trailers and limited material storage) is located on Parcel 4 and is operated by Goodfellow Bros., Inc.. A temporary construction baseyard is also located on Parcel 8 and is related to the construction activities taking place on the adjoining properties.

As noted in Section 2.3 above, Parcel 9 & 18 consist of Lipoa Parkway that provides access to the Maui Research and Technology Park from Piilani Highway.

Located along the western boundary of Parcel 16 is a groundwater well; water storage tank; and small-scale sewer pump station. The well supplies irrigation water to the Maui Research and Technology Park. The sewer pump station services the businesses in the Maui Research and Technology Park, pumping sewage to the Kihei Wastewater Treatment Plant.

2.5 Current Uses of the Adjoining Properties

The current uses of the adjoining properties as observed by the investigator during the site reconnaissance are as follows (see also Figure 2, Site Plan, in Appendix A):

| | |
|--|--|
| ▪ <i>Northern Adjoining Property:</i> | Undeveloped gulch and grazing land beyond. |
| ▪ <i>Eastern Adjoining Property:</i> | Undeveloped grazing land and U.S. Air Force's Remote Maui Experiment (RME) facility. (U.S. military research). |
| ▪ <i>Southern Adjoining Property:</i> | Undeveloped grazing land. |
| ▪ <i>Western Adjoining Property:</i> | Undeveloped land, golf course and initial land development activities. |
| ▪ <i>Centrally-situated Adjoining Properties</i> | Commercial office buildings of the Maui Research and Technology Park. |

End of Section

3.0 USER PROVIDED INFORMATION

As a standard of practice, the following information was requested from the Client during the preliminary phases of this investigation:

- Title records and knowledge of environmental liens or activity and land use limitations (AULs);
- Personal, specialized knowledge or experience in regard to *recognized environmental conditions* concerning the property; and
- If applicable, actual knowledge of a significant, low purchase price for the property, and explanation for the lower price.

The purpose of this information is to help identify the possibility of *recognized environmental conditions* in connection with the property. These tasks do not require the technical expertise of an environmental professional and are generally not performed by environmental professionals performing the Phase I ESA. MEV submits a Preliminary Environmental Investigation questionnaire to the Client for this information. The completed questionnaire is attached in Appendix B.

According to information provided by the Client in the Preliminary Environmental Investigation, the Client is not aware of any environmental liens, proceedings, or investigations against the subject property as of the date of this ESA.

End of Section

4.0 RECORDS REVIEW

The purpose of a record review is to obtain and review records that will help identify *recognized environmental conditions* in connection with the subject property. The service of Environmental Data Resources, Inc. (EDR) was utilized to compile the database listings.

4.1 Standard Environmental Record Sources

The subject property and properties within the minimum search distances were reviewed from the following record sources (see below). Risk sites, if any, that may be located on or adjacent to the subject property, or are within close proximity to the subject site are described. Refer to Appendix B, EDR Radius Map Report, for a complete listing and description of all sites located within the designated search distances, details, and government agency database release dates.

The EDR Report bases the location of the listed risk sites on longitude/latitude information provided by the respective government agency. MEV confirms the locations of risk sites within close proximity to the subject site during the site visit. When the MEV site visit contradicts the EDR Report, it has been so stated.

THE SUBJECT SITE IS NOT LISTED ON ANY OF THE FOLLOWING FEDERAL OR STATE DATABASE LISTINGS OF THE EDR REPORT.

Federal Database Listings

- ▼ **National Priorities List (NPL or Superfund) and Proposed NPL, EPA.** The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program.
 - *The EDR database report indicates no listings within the one-mile search radius of the subject site.*
- ▼ **Comprehensive Environmental Response, Compensation and Liability Information System List (CERCLIS), EPA.** The CERCLIS list contains data on potentially hazardous waste sites that have been reported to EPA by states, municipalities, private companies and private persons, pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLIS contains sites that are either proposed to or on the NPL and sites, which are in the screening and assessment phase for possible inclusion on the NPL.
 - *The EDR Report indicates no listing within the 1/2-mile search radius of the subject site.*
- ▼ **CERCLIS – No Further Remedial Action Planned (NFRAP), EPA.** NFRAP sites may be sites where, following an initial investigation, no contamination was found, contamination was removed quickly without the need for the site to be placed on the NPL, or the contamination was not serious enough to require Federal Superfund action or NPL consideration.
 - *The EDR Report indicates no listing within the 1/2-mile search radius of the subject site.*
- ▼ **Corrective Action Report (CORRACTS), EPA.** The CORRACTS report lists hazardous waste handlers with RCRA corrective action activity.
 - *The EDR Report indicates no listings within the one-mile search radius of the subject site.*
- ▼ **Resource Conservation and Recovery Information System (RCRIS), EPA/NTIS.** RCRIS includes selective information on sites that generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA).
 - *The EDR Report indicates no listings within the 1/2-mile search radius of the subject site, which treat, store, and/or dispose of hazardous waste (TSD).*

- *The EDR Report indicates no listings within the ¼-mile search radius of the subject site, which generate at least 1,000 kg/month of non-acutely hazardous waste or 1.0 kg/month of acutely hazardous waste (Lg. Quan. Gen. - LQG).*
- *The EDR Report indicates one (1) listing within the ¼-mile search radius of the subject site, which generates less than 1,000 kg/month of non-acutely hazardous waste (Sm. Quan. Gen. - SQG).*

Due to the listing's current status with the E.P.A. and due to the positioning relative to the subject site, this site is not anticipated to negatively impact the environmental condition of the subject property.

▼ **Emergency Response Notification System (ERNS), EPA/NTIS.** Records and stores information on reported releases of oil and hazardous substances.

- *The subject site is not listed.*

State of Hawaii Database Listings

▼ **Sites List (SHWS), DOH.** A list of facilities, sites, or areas in which the Office of Hazard Evaluation and Emergency Response (HEER) has an interest, has investigated or may investigate under HRS 128D (includes CERCLIS sites).

- *The subject site is not listed.*
- *The EDR Report indicates no listing within the ½-mile search radius of the subject site.*

▼ **Permitted Landfills in the State of Hawaii (SWF/LF), DOH.** An inventory of solid waste disposal facilities or landfills in the State of Hawaii. These may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

- *The EDR Report indicates no listings within the ½-mile search radius of the subject site. See Site List (SHWS) above.*

▼ **Leaking Underground Storage Tank (LUST) database, DOH.** An inventory of reported leaking underground storage tank incidents.

- *The subject site is not listed.*
- *The EDR Report indicates no listing within the ½-mile search radius of the subject site.*

▼ **Underground Storage Tank (UST) database, DOH.** USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with DOH.

- *The subject site is not listed.*
- *The EDR Report indicates no listing within a 1/4-mile radius of the subject site.*

The Elleair Golf Club (formerly the Silversword Golf Course) is located within a ¼ -mile from the western edge of the property. This site is listed on the State UST database. Three (3) tanks are listed as "permanently out of use" and are not listed on the LUST database. Due to the listing's current status with the State DOH and due to the positioning and distance relative to the subject site, this site is not anticipated to have negatively impacted the environmental condition of the subject property.

4.2 Additional Environmental Record Sources

The subject property and properties within the minimum search distances were reviewed from the following record sources. Refer to Appendix B, EDR Radius Map Report, for a complete listing and description of all sites located within the designated search distances, details, and database release dates.

Federal Database Listings

- ▼ **Superfund (CERCLA) Consent Decrees (CONSENT), EPA Regional Offices.** Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites.
 - *The subject site is not listed.*
 - *The EDR Report indicates no listings within the one-mile search radius of the subject site.*
- ▼ **Records of Decisions (ROD), EPA.** ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.
 - *The subject site is not listed.*
 - *The EDR Report indicates no listings within the one-mile search radius of the subject site.*
- ▼ **National Priority List Deletions (De-listed NPL), EPA.** A list of sites that have been deleted from the NPL where no further response is appropriate.
 - *The subject site is not listed.*
 - *The EDR Report indicates no listings within the one-mile search radius of the subject site.*
- ▼ **Facility Index System/Facility Identification Initiative Program Summary Report (FINDS), EPA.** Contains both facility information and 'pointers' to other sources that contain more detail.
 - *The subject site is not listed.*
- ▼ **Hazardous Materials Information Reporting System (HMIRS) DOT.** A list of hazardous material spill incidents reported to DOT.
 - *The subject site is not listed.*
- ▼ **Material Licensing Tracking System (MLTS), Nuclear Regulatory Commission (NRC).** A list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements.
 - *The subject site is not listed.*
- ▼ **Mines Master Index File (MINES), Department of Labor, Mine Safety and Health Administration.** Contains both facility information and 'pointers' to other sources that contain more detail.
 - *The subject site is not listed.*
 - *The EDR Report indicates no listings within the ¼-mile search radius of the subject site.*
- ▼ **Federal Superfund Liens (NPL Liens), EPA.** A list of properties whereby the EPA has filed liens against real property in order to recover remedial action expenditures or when the property owner receives notification of potential liability.
 - *The subject site is not listed.*
- ▼ **PCB Activity Database System (PADS).** Identifies generators, transporters, commercial storers and/or brokers and disposers of PCBs who are required to notify EPA of such activities.
 - *The subject site is not listed.*
- ▼ **RCRA Administrative Action Tracking System (RAATS), EPA.** A historical archived database containing records on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by EPA. The database was discontinued on September 30, 1995.
 - *The subject site is not listed.*

- ▼ **Toxic Chemical Release Inventory System (TRIS), EPA.** A list of facilities which release toxic chemicals to the air, water, and land in reportable quantities under SARA Title III, Section 313.
 - *The subject site is not listed.*
- ▼ **Toxic Substances Control Act (TSCA), EPA.** Identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list.
 - *The subject site is not listed.*
- ▼ **Federal Insecticide, Fungicide, & Rodenticide Act (FIFRA)/TSCA Tracking System (FTTS INSP and FTTS), EPA – Office of Prevention, Pesticides and Toxic Substances.** FTTS tracks administrative cases, pesticide enforcement actions, and compliance activities related to FIFRA, TSCA, and Emergency Planning and Community Right-to-Know Act (EPCRA).
 - *The subject site is not listed.*

State of Hawaii Database Listings

- ▼ **Release Notifications (SPILLS), DOH.** Releases of hazardous substances to the environment reported to the HEER Office. The following databases are included in the HEER Spill List:

Release Notification Report: a compilation of releases reported to HEER.

Hawaii Emergency Planning and Community Right-to-Know Act (HEPCRA): a list of facilities that have submitted Tier II and Form Rs as a reporting requirement.

- *The subject site is not listed.*

- ▼ **Registered Wells and Dry Wells, DLNR.** (See Section 5.5.6) There is one (1) registered well listed for the subject property. (*DLNR data*). State Well No. 4426-03 was constructed by David Pico on TMK (2) 2-2-24:16 in 1990. The well owner is listed as Maui R & T Partnership. Currently the well is used for irrigation purposes. Nearby listed wells are used for irrigation or observation purposes or are unused at this time. See Figure 1, Appendix A for nearest well locations.

- ▼ **Air Quality Permit, DOH.** Current activities conducted on-site do not require an air quality permit.

- ▼ **Storm Water Discharge (NPDES) Permit, DOH.** Current activities conducted on-site do not require a NPDES permit.

County and Other Database Listings

Other local records of environmental interest that were reviewed or considered for review by MEV included:

- ▼ **Fire Department, County of Maui.** The Maui County Fire Department (MCFD) maintains file material that is not on a database. MCFD was contacted for an inquiry on the subject property. No incidents were reported to MEV on the subject site.
- ▼ **Former Manufactured Gas (Coal Gas) Sites.** EDR provides exclusive information regarding the existence and location of Coal Gas sites.
 - *The EDR Report indicates no listings within the one-mile search radius.*
- ▼ **Grading/Grubbing Permit, County of Maui.** Grading permits are currently open for the subject property (Parcels 9 & 54) with the County of Maui. The permit uses are listed as Lipoa Parkway improvements and GBI baseyard.
- ▼ **Hazardous Waste Disposal Documents.** MEV was not supplied with any hazardous waste disposal documents.

- ▼ **Maui Electric Company.** Maintains records on county power transformers regarding PCB-containing equipment and equipment maintenance. Three (3) pad-mounted electrical transformers (non-PCB) were observed on the subject property on Lipoa Parkway. See Section 5.3.7.
- ▼ **Other Environmental Reports.** No environmental reports for the subject property were made available to MEV.
- ▼ **Planning & Zoning, County of Maui.** According to the Maui County Department of Planning, the majority of the subject site's zoning is AG, "Agricultural" and **is not** within the boundaries of the Special Management Area (SMA). As of the completion of this report, the County of Maui Zoning Division had not responded to MEV's numerous attempts to obtain the current zoning of all of the subject property's parcels.
- ▼ **Property Tax Office, County of Maui.** The Maui County Property Tax Office maintains records of past ownership, maps, sketches and other information as it pertains to the subject property. (See also Section 8.0). According to Maui County Tax Office, the current property owners are listed as Haleakala Ranch Co. and Maui R & T Park Partners.
- ▼ **Wastewater Discharge Permit, County of Maui.** MEV did not identify any wastewater discharge permits registered to the subject property. According to the State Department of Health, the small-scale sewer pump station located on-site does not require a permit.

4.3 Physical Setting Source(s)

The following sources were reviewed for physical setting information (refer to Section 7.0 for a complete listing):

- Atlas of Hawaii;
- Civil Defense Tsunami Evacuation Map;
- Geologic and Topographic Map (Hawaii Atlas & Gazetteer);
- Groundwater Map and Water Quality Plan for State of Hawaii;
- U.S. Department of Agriculture, Soil Conservation Service, Soil Survey of the Islands of Kauai, Oahu, Maui, Molokai, and Lanai, HI;
- U.S. Geological Survey, 7.5 Minute Topographic Map, Puu O Kali, HI, 1983 & 1992.

These data sources were used to provide information regarding physical characteristics of the subject site and surrounding area. This information is typically used in analysis of potential geological trends, which might impact environmental conditions of the subject site. Note that this investigation is not intended to identify geologic hazards associated with the subject property.

4.4 Historical Use Information Regarding the Property and Adjoining Properties

The following historical data sources were reviewed for this report (refer to Section 7.0 for a complete listing):

- Aerial Photographs;
- Department of Planning and Zoning, County of Maui;
- Maui County Fire Department (Fire Prevention Bureau / Hazardous Materials Division);
- Maui County Real Property Tax Records;
- Personal Interviews;
- Sanborn Maps (not available for this location);
- State of Hawaii, Department of Health, Environmental Management Division;
- Environmental Data Resources (EDR).

Historic Aerial Photographs

A series of aerial photographs with coverage of the subject property and surrounding area were examined. See Figure 2, Appendix A, for clarification of specific location.

| Table 1.0. Historical Aerial Photograph Analysis. | | | |
|---|---------------------------------|--|-----------------------------|
| Date | Aerial Photo Analysis | | |
| 2/28/50 | SS: N, E, S, W: RG: | Undeveloped, vegetated pasture land. Undeveloped, vegetated pasture land. Limited unpaved road network noted on the eastern property. Very limited residential and agricultural development further to the west. | |
| 1965 | SS: N, E, S, W: RG: | No significant changes noted. No significant changes noted. No significant changes noted. | |
| 3/16/67 | SS: N, S: E: W: RG: | No significant changes noted. Only the western portion of the property is visible in the photo. No significant changes noted. Only the western portion of the north and southern adjoining properties are visible in the photo. Not visible in the photo. No significant changes noted. Unpaved access road noted. No significant changes noted. | |
| 10/25/82 | SS: N, E, S: W: RG: | No significant changes noted. No significant changes noted. No significant changes noted, except for the construction of the Piilani Highway. Significant residential growth on the west side of the Piilani Highway (coastal development). The Kihei Wastewater Treatment Plant is visible further to the southwest. | |
| 7/16/87 | SS: N,E: S: W: RG: | No significant changes noted. Unpaved road noted along the southwestern boundary. Only the very southern portion of the property is visible in the photo. Not visible in photo. No significant changes noted. Undeveloped land and Silversword (Elleair) Golf Course and related buildings noted. Increased residential/commercial development on the west side of Piilani Highway. | |
| 10/27/90 | SS: N: E, S: W: RG: | Only the northwestern and most western portions of the property are visible in the photo. Lipoa Parkway has been constructed and leads to the Maui R&T Park. A livestock corral is visible in the northwest corner of the property. No significant changes noted. Not visible in photo. No significant changes noted. No significant changes noted. | |
| 9/27/96 | SS: N: E, S: W: RG: | Only the northwestern and most western portions of the property are visible in the photo. The livestock corral previously noted is still visible in the northwest corner of the property. A road (appears unpaved) is visible on Parcel 17 leading toward the present-day retention basin located on Lot 3-C-2. No significant changes noted. Not visible in photo. No significant changes noted. Increase in commercial development further to the northwest. | |
| Notes: | | | |
| SS | Subject Site | S | Southern Adjoining Property |
| N | Northern Adjoining Property | W | Western Adjoining Property |
| E | Eastern Adjoining Property | RG | Regional Area |

MEV did not observe any features on aerial photographs examined that would suggest the presence of significant vegetative stress, soil staining, or bulk storage of chemicals such as drums or tanks.

End of Section

5.0 SITE RECONNAISSANCE

Information regarding the storm water flow, property layout, physical characteristics, and adjoining property conditions are presented in Figure 2, Site Plan, and site photographs located in Appendix A.

5.1 Methodology and Limiting Conditions

A site investigation focuses on obtaining information indicating the likelihood of identifying *recognized environmental conditions* in connection with the property and assessing the subject property in relation to surrounding land uses and natural surface features. It includes a physical inspection of the real property and any on-site building structures.

On May 3 and May 4, 2007, MEV personnel, Mr. Jeffrey Kermodé, conducted an overall site inspection of the subject site. The method used to observe the subject property included: (1) walking the approximate perimeter of the subject property and along any on-site roads, (2) thoroughly inspecting any on-site baseyards and areas of limited dumping noted (3) conducting random and non-random traverses of the subject property. The property perimeter boundaries were not effectively defined. MEV made boundary estimates based on a Maui County Real Property Tax map and a property map supplied by the Client.

Certain physical obstructions limited the investigators from total property observations of native surface soils. Areas of dense vegetation and the presence of a limited number of portable storage containers/office trailers obscured the underlying surface soils. Exposed soils that were observable did not exhibit any evidence of gross surface contamination. Limited soil staining was observed.

Any environmental conditions reported here are not intended to include minimal conditions that 1) generally do not present a material risk of harm to public health or the environment and 2) generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.

5.2 General Site Setting

5.2.1 Current and Past Use(s) of the Property

Current Uses

The current owners of the subject property are Haleakala Ranch Co. and Maui R & T Park Partners.

The property consists of nine (9) land parcels, TMK (2)-2-2-24:4, 8, 9, 14, 15, 16 portion, 17 portion, 18 & (2)-2-2-2:54 portion.

The property is essentially undeveloped, grazing land. Two (2) small areas of the property are used as construction baseyards. The baseyards are located on Parcels 4 & 8. A well, sewer pump station and water holding tank are located along the western boundary of Parcel 16.

Information presented here represents those items visually or physically observed or identified in the interviews or records review.

Past Uses

The majority of the subject property was previously owned by Haleakala Ranch Co. for several decades and was used for cattle grazing purposes.

The knowledge of past uses of the property was primarily obtained from aerial photographs, client supplied information, interviews and property tax records. Topographic maps and the Hawaii Atlas provided limited regional information.

5.2.2 Current and Past Uses(s) of the Adjoining Properties and Surrounding Area

MEV has researched current uses of adjoining properties and at its discretion, past uses of the adjoining properties and the surrounding areas. Information presented here represents those items visually or physically observed or identified in the interviews or records review. The information is described herein as items that may indicate *recognized environmental conditions* with adjoining properties and those conditions that may indicate a high probability of migration of hazardous substances or petroleum products to the subject property.

| Adjoining Property | Period | Land/Property Use | Concerns | Comments |
|-----------------------|---------|--|-----------|---|
| North of Subject Site | Past | Grazing land. | None. | None. |
| | Present | Grazing land. | As above. | As above. |
| East of subject site | Past | Grazing land. | None. | None. |
| | Present | Grazing land; water storage tank; US Air Force RME facility. | None. | Limited chlorine storage for the water holding tank. The operations conducted at the RME facility are classified, however, MEV's knowledge of the facility does not lead them to believe this site poses an environmental concern. |
| South of subject site | Past | Grazing land. | None. | None. |
| | Present | Grazing land. | As above. | As above. |
| West of subject site | Past | Grazing land. | None. | None. |
| | Present | Golf course and grazing land. | None. | The golf course previously maintained underground fuel storage tanks, however, these tanks were removed and are not considered a concern. |

The development of past uses of the adjoining properties was primarily made from interviews, MEV site reconnaissance, and aerial photographs. Topographic maps and the Hawaii Atlas provided limited regional information.

5.2.3 Topography

The subject property is situated east of (mauka of) Piilani Highway in Kihei, Maui on the north and south side of Lipoa Parkway. The property lies on the western slopes of East Maui (Haleakala). The physiographic type feature of the area is described as Kula, Slightly Dissected Upland.

The site elevation ranges from approximately 60 feet (Lipoa & Piilani Highway intersection) to 280 feet (northeast boundary of Parcel 54) above mean sea level. Regional topography is characterized by westerly trending slopes of approximately 3 to 4 percent. On-site relief for the property is estimated to be approximately 220 feet, descending from a high point along the eastern lot boundary to a low point along the western lot boundary.

The nearest prominent natural feature is Waipuilani Gulch, located along the northern property boundary. See Figure 1, Appendix A.

5.2.4 Geology and Soils

The Haleakala Volcanics have been divided into three series. The oldest are the Honomanu Volcanic Series, which is the primitive shield composed of Pahoehoe and aa flows of tholeiite, tholeiitic olivine basalt, and oceanite. Above sea level, later lavas have almost entirely buried this volcanic series. The Kula Volcanic Series overlies the Honomanu Volcanics and is composed predominantly of hawaiite with lesser amounts of alkalic olivine basalt and ankaramite. Near the summit of Haleakala Volcano, the Kula Series is at least 750 meters thick and near the shore only 15 to 60 meters thick. After a long period of erosion, subsequent renewal activity included the flows and cones of the Hana Volcanic Series, which are composed of the same rock type as of the Kula Series, but alkalic olivine basalts and basaltic hawaiites are predominant over the more siliceous types.

According to the U.S. Department of Agriculture, the following soil series underlies the subject site:

- Waiakoa extremely stony silty clay loam, 3 to 25 percent slopes, eroded (WID2). Waiakoa Series soil consists of well-drained soils on uplands on the island of Maui. These soils developed in material weathered from basic igneous rock. Permeability is considered low and the surface runoff is moderate. The erosion hazard is severe. This soil is used for pasture and wildlife habitat.

Other common, surface geologic phenomena investigated in an environmental site assessment are faults, landslides, rock falls, earthquake zones and volcanic eruptions. In 1992, the USGS reevaluated the seismic hazards for the State of Hawaii, and Maui County was classified as Zone 2B. This indicates that in any given year within a 50-year period (average building life span) there is a 10% chance that 1/5 the force of gravity (ground acceleration) during an earthquake will be exceeded.

5.2.5 Hydrology

The subject site area has an annual average rainfall of approximately 10 to 15 inches. The average temperature range from the annual high to the annual low is 85 degrees and 65 degrees Fahrenheit, respectively. The pre-development vegetation zone within this temperature and rainfall range is characterized as Kiawe and lowland shrubs. Characteristic plants consist of kiawe, koa haloe, finger grass and pili grass.

On-site drainage follows the natural slope of the land and is generally directed from the higher property elevations along the eastern boundary to the lower elevations of the western boundary. See Figure 2, Appendix A. A stormwater retention basin is located on an adjoining property, Lot 3-C-2. This basin is located upgradient of Parcel 17 (portion). Parcel 17 acts as a possible spillway for this basin. See Photo 2, Appendix A.

The pertinent Federal Insurance Rate Map (FEMA FIRM MAP #150003 0265C dated September 6, 1989) depicts the area as minimal flooding (Zone C).

The Civil Defense Tsunami Evacuation Maps indicate the subject property is **not** within the Tsunami reach-zone. The Pacific Ocean is located approximately 0.75 miles west of the subject site western boundary (Lipoa Parkway and Piilani Highway intersection).

5.2.6 Hydrogeology

As with all islands of the United States, Maui is regulated by the Coastal Zone Management Act of the Clean Water Act. These two designations require protective comprehensive plans for groundwater management and limit the extent of certain types of development and land use. One important management criterion is the disposal of wastewater. The Water Resources Research Center has designated the groundwater management area as the *Kamaole Aquifer System* within the *Central Aquifer Sector*. The groundwater underlying the subject site is defined as follows:

| Aquifer | Aquifer Type: Hydrology & Geology | Status of Groundwater | | | | |
|---------|---|-----------------------|------------------------------------|--------------------|---------------|--------------------------------|
| | | Development Stage | Utility | Salinity (mg/l Cl) | Uniqueness | Vulnerability to Contamination |
| Upper | Unconfined, perched, high-level aquifer (fresh water not in contact with seawater). | Potential Use | Useful as a Drinking Water Source. | Fresh | Replaceable | High |
| Lower | Unconfined basal aquifer occurring in horizontally extensive lavas (Flank) | Currently Used | Drinking Water Source. | Low | Irreplaceable | Moderate |

The following are descriptions of the aquifer classification codes, according to Water Quality Plan: *basal* – freshwater in contact with seawater; *high level* – freshwater not in contact with seawater; *unconfined* – water table is the upper surface of the saturated aquifer; *confined* – aquifer is bounded by impermeable or poorly permeable formations; and *confined or unconfined* – the actual condition is uncertain.

Aquifer Type Geology: flank, dike, flank/dike, perched, dike/perched, and sedimentary.

Development Stage – currently used, potential use, no potential use: Aquifers are differentiated according to those already being used (currently used), those with potential utility (potential use), and those having no potential developability.

Utility – drinking, ecologically important, neither: Identifies aquifers by use.

Salinity – fresh, low, moderate, high, and seawater: The gradation of groundwater from fresh to seawater is a feature of all basal aquifers in Hawaii. The upper limit of the standard for drinking water is 250 mg/l Chlorine (Cl) (fresh) and true seawater has a chloride content of 18,980 mg/l.

Uniqueness – irreplaceable and replaceable: The classes irreplaceable and replaceable are direct EPA derivatives. Virtually all potable water in the state of Hawaii should be considered irreplaceable over the long term.

Vulnerability to Contamination – high, moderate, low, none: Because of the geographical limits of resources, interconnection among groundwater sources and the relatively rapid time of groundwater travel, aquifers can be described as being either vulnerable or not vulnerable to contamination.

At the location of the on-site groundwater well, the depth to the basal groundwater is approximately 120 feet below the surface. The flow direction is expected to be in a westerly direction. Depths to the basal groundwater layer will vary depending on the positioning on the site. However, in localized areas, confining layers and/or dike compartments may maintain a high water table.

The majority of the subject site is located below (makai of) the Underground Injection Control (UIC) line. Parcel 54 is located above (mauka of) the UIC line. The UIC line is the designated boundary that divides protected inland areas situated over drinking water sources from seaward areas located over non-potable water sources. Sites makai of the UIC line are not considered drinking water sources and permit limitations are imposed by Maui County, Clean Water Branch (CWB). Sites mauka of the UIC line are considered drinking water sources and permit limitations are imposed and requirements are more stringent by the State Department of Health, Clean Water Branch (CWB).

5.2.7 Potable Water Supply and Sewage Disposal System

Currently, this property remains essentially undeveloped and, therefore, no sewage is generated or potable water supplied. A groundwater well has been developed on-site for irrigation use at the Maui Research & Technology Park. A small-scale sewer pump station is located on Parcel 16 that services the businesses in the Maui Research and Technology Park, pumping sewage to the Kihei Wastewater Treatment Plant.

5.3 Interior and Exterior Observations

5.3.1 Hazardous/Regulated Substances and Petroleum Products in Connection with Identified Uses.

MEV did not identify any hazardous substances and/or petroleum products that are in connection with identified current uses as visually and physically observed on the property at the time of the site visit except for the following:

- Small quantities of fuel, paints and adhesives are stored at the temporary construction baseyard located on Parcel 8. Regulated items identified by MEV were effectively stored in appropriate containers. See Photos 14 & 15 and Figure 2, Appendix A.

5.3.2 Hazardous/Regulated Substances and Petroleum Products/Containers (not in connection with identified current uses).

MEV did not identify any hazardous/regulated substances and/or petroleum products that are not in connection with identified current uses as visually and physically observed on the property at the time of the site visit except for the following:

- One (1) drip pan, containing an oil filter and a deteriorating plastic container of waste oil, is located under a stored office trailer (not in use) situated near the northern portion of Parcel 9. See Photos 16 & 17 and Figure 2, Appendix A. Limited soil staining is associated with these items.

There is no evidence of any historic significant misuse of hazardous or regulated substances on the subject property.

5.3.3 Unidentified Substance Containers

MEV did not observe any unidentified substances suspected of being possible hazardous/regulated substances or petroleum products as visually and physically observed on the property at the time of the site reconnaissance.

5.3.4 Storage Tanks

No indications regarding the current presence or historic use of underground storage tanks (USTs) on the subject site were obtained through our review of regulatory databases, interviews, or through MEV's site reconnaissance.

One (1) poly tank (empty) and one (1) steel above-ground storage tank are located on Parcel 16. These tanks are used to store water for livestock and irrigation purposes. See Photo 12 and Figure 2, Appendix A.

5.3.5 Odors

MEV identified no suspect odors on the subject property except in the area of limited soil staining and waste oil storage noted in Section 5.3.2 above..

5.3.6 Pools of Liquid

MEV did not observe any pools or sumps of liquids likely to be hazardous substances or petroleum products to the extent visually and/or physically observed on the subject property at the time of the site visit or from interviews or records review.

5.3.7 Indications of PCBs

Pole or pad-mounted transformers numbered 7777 or above are considered non-PCB containing by the Maui Electric Company. Pad-mounted electrical transformers (non-PCB) were observed on the subject property along Lipoa Parkway. The transformers appeared to be in good condition with no sign of leakage.

Background Information:

Polychlorinated biphenyls (PCBs) are groups of manufactured organic chemicals that contain 209 individual chlorinated chemicals (known as congeners) and were introduced in 1929. PCBs have been used widely as coolants and lubricants in transformers, capacitors, and other electrical equipment. Products containing PCBs are old fluorescent lighting fixtures, electrical appliances containing PCB capacitors, old microscope oil, and hydraulic fluids.

The manufacture of PCBs stopped in the United States in 1977 because of evidence that they build up in the environment and cause harmful effects. The distribution in commerce of PCB containing items was banned in 1979 (40 CFR 761.20). The EPA aggressively enforces regulations concerning PCB manufacturing, use, distribution, release and disposal under the Toxic Substance Control Act (TSCA). This federal agency extensively regulates the use, servicing, and disposal of PCBs in electrical equipment by enforcing marking, notification, inspection, and record keeping requirements.

5.4 Interior Observations

The subject property is undeveloped with no significant, permanent building structures. This section does not apply.

5.5 Exterior Observations

5.5.1 Pits, Ponds, and Lagoons

There were no areas identified as any man-made or natural depressions that are, or would have been, likely to hold waste liquids or sludge from industrial operations or other activities.

5.5.2 Stained Soil or Pavement

One area of limited soil staining was noted by MEV at the northern portion of Parcel 9 and was related to the ineffective storage of a drip pan containing waste oil. The staining appeared to be limited in both horizontal and vertical extent. See Photos 16 & 17 and Figure 2, Appendix A.

5.5.3 Stressed Vegetation

There were no areas of stressed vegetation identified on the subject property at the time of the site visit that are, or would have been, likely caused from something other than insufficient water (or flooding).

5.5.4 Solid Waste

There were no indications of significant solid waste dumping or suspect fill materials, mounds, depressions or excavations observed on this property during the site reconnaissance, nor on historic aerial photographs.

One (1) solid waste bin was noted by MEV on the GBI baseyard. See Photo 19, Appendix A.

Improperly disposed (abandoned) solid waste items that were identified by MEV on the subject site at the time of the site reconnaissance consisted of the following:

- Limited amounts of miscellaneous debris dumping including household waste and construction debris. See Figure Photo 22, Appendix A.
- Regulated items (1 derelict vehicle, 3 vehicle batteries, tires, vehicle parts and a white good). See Photos 20, 21, 23 & 24 and Figure 2, Appendix A.

No solid waste dumping was noted by the archaeologist that conducted a survey of the area.

5.5.5 Wastewater or Storm Water – Discharge Drains, Dry Wells, Drainage Ways, and Retention Basins

MEV did not note any wastewater discharge drains, dry wells, or retention basins located on-site. A retention basin is located adjacent to the subject property. See Figure 2, Appendix A.

5.5.6 Wells

One (1) groundwater well (State Well No. 4426-03) is located near the western boundary of Parcel 16. See Photo 12 and Figure 2, Appendix A. This well was constructed in 1990 and is used for irrigation purpose by Maui R&T Partnership. A permit to construct this well was obtained from the State.

Wells located near the subject property are used for observation or irrigation purposes or are unused at this time. See Figure 1, Appendix A for the nearest well locations.

5.5.7 Septic and Cesspool Systems

The subject property has no operational cesspool or septic system located on-site.

5.6 Non-Scope Considerations

The concerns listed below are not normally considered relevant under CERCLA, however, they may be considered regulated under other environmental laws and ordinances and may present a potential liability to the property owner.

5.6.1 Asbestos-Containing Materials (ACM)

The subject property did not have any permanent on-site building structures that would consist of asbestos-containing materials. No suspect asbestos-containing debris was noted.

5.6.2 Lead-Based Paint

The subject property did not have any permanent on-site building structures that would consist of lead-based paint. No suspect lead-based paint debris was noted.

5.6.3 Arsenic-Containing Substances

MEV did not observe any suspect arsenic-containing building materials or waste materials at the time of the site visit.

5.6.4 Radon

MEV did not identify any man-made products on the subject property that are known or suspected to emit radioactive decay elements.

Background Information:

Radon is a colorless and odorless radioactive gas that can produce health effects such as cellular injury. Radon gas can occur in the natural environment as concentrations from certain rocks and geologic conditions have a high radon-emanation potential.

These surface rock types are not known to occur in Hawaii. It is possible that increased concentrations of Radon could occur in regions where geologic fault and volcanic rift zones may release gases from deeper earth sources. However, the State of Hawaii, Department of Health (DOH) has not addressed concerns for any significant levels of gas to occur anywhere in Hawaii. This was based on the 1992 and 1996 DOH investigations conducted in elementary schools throughout the State.

5.6.5 Lead in Drinking Water

The subject property is undeveloped. This section does not apply.

5.6.6 Ecological Resources, Endangered Species, Cultural and Historic Resources, and Wetlands

There are no known critical habitats or threatened and/or endangered species on the project site. The subject site is not located within the County of Maui's Special Management Area (SMA).

According to Mr. Dega of SCS Archaeology, a cultural survey has been completed for this site. Any significant findings in this survey relating to the subject property should be thoroughly addressed.

5.6.7 Indoor Air Quality

The subject property is undeveloped. This section does not apply.

5.6.8 High Voltage Transmission Lines

MEV did identify transmission lines on the subject site (Parcel 15 & 16). These lines are not expected to have a significant impact on the subject site in its present form, however, should be addressed if the areas are developed, especially for residential purposes.

End of Section

6.0 INTERVIEWS

MEV conducts interviews with persons that may have specific knowledge on the subject property and any land use activities that may have operated on-site in the past or continue to currently operate on the subject property. Interviews are also an effective tool to better understand the overall historical regional and local setting of the subject site. Whenever possible, MEV attempts to interview the present and past owner(s), site manager, occupants, local government officials and other relevant contacts. See also Section 8.3.

6.1 Interview with Client Representative

Client representative, Mr. John Maloney, provided MEV with limited information on the subject property's history, ownership and current operations located on-site.

6.2 Interview with Property Owner Representative

Mr. Scott Meidell of Haleakala Ranch informed MEV that the ranch used and continues to use the majority of the subject property for grazing activities only. Mr. Meidell was not aware of any *Recognized Environmental Conditions* or historic solid waste dumping activities related to the subject property.

6.3 Other Persons Interviewed

A list of any additional persons interviewed during the course of this investigation is located in Section 8.3. None of these persons interviewed had any specialized knowledge of the site relating to *Recognized Environmental Conditions* on the subject site.

End of Section

7.0 FINDINGS, OPINIONS, AND CONCLUSIONS

7.1 Recognized Environmental Conditions

Recognized environmental conditions, as defined by ASTM Standard E1527-05, are the presence or likely presence of any hazardous substance or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, ground water, or surface water of the property. **Recognized environmental conditions** are described with regard to (1) the nature and extent of the environmental condition, (2) potential or actual environmental threat, (3) potential for transport (migration) of any environmental conditions, and (4) consideration for further investigation. The term is not intended to include *de minimis* conditions that generally do not present a material risk of harm to public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.

MEV has performed this Phase I Environmental Site Assessment in conformance with the scope and limitations of the ASTM Practice E 1527-05 for the subject property, located within and surrounding the Maui Research and Technology Park, [TMK (2)-2-2-24:4, 8, 9, 14, 15, 16 portion, 17 portion, 18 & (2)-2-2-2:54 portion] in the community of Kihei, Maui, defined as the subject property.

Any exceptions to or deletions from this practice are described in Section 1.4, Limitations and Exceptions, of this report.

This assessment has revealed no evidence of *recognized environmental conditions* in connection with the property.

7.1.1 Database Listings (See Section 4.0 & EDR Report, Appendix B)

Findings:

The subject site is not listed. The listed, nearby risk site unlikely poses a significant concern to the subject property.

7.1.2 Current and Historic Use or Storage of Hazardous and Regulated Substances (See Sections 5.3.1 & 5.3.2)

Findings:

There is no evidence of any historic or current significant misuse of hazardous or regulated substances on the subject property. See Section 7.2.1 below.

7.2 Other Environmental Concerns

The concerns listed below may not be considered **recognized environmental conditions** by ASTM definition. However, they may be considered regulated under other environmental laws and ordinances and may present a potential liability to the property owner.

7.2.1 Ineffective Storage of Regulated Waste and Limited Soil Staining (See Section 5.3.2 & 5.5.2)

Findings/Concerns:

A limited amount of waste oil is being ineffectively stored beneath an office trailer (not in use) located on-site. A limited amount of surface soil staining is associated with this waste oil.

Opinions and Conclusions:

This waste oil and any related surface soil staining should be properly managed. Though not anticipated, if the stained soils extend beyond the immediate surface soils (indicating possible gross contamination), the underlying soils should be tested to confirm all contamination has been effectively removed.

7.2.2 Solid Waste Management (See Section 5.5.4)

Findings/Concerns:

A limited amount of dumping activity was evident on the subject property, including regulated waste items, at the time of the MEV's site reconnaissance.

Opinions and Conclusions:

Any waste disposal should be in a permitted solid waste landfill or recycled in a manner that complies with all local, state, and federal regulations as applicable to the specific waste type with special attention given to regulated items (derelict vehicle, batteries, tires, waste oil, etc.).

Due to presence of heavily vegetated areas and storage containers, the entire subject site and underlying soils were not visibly inspected. It is important to ensure that if clearing of the property commences and large amounts of construction debris or unidentifiable substances (containers) are discovered, proper waste identification, testing and applicable waste handling/disposal procedures are followed.

7.2.3 Surface Waters and Area Aquifer Protection

Findings/Concerns:

If future land use includes developing the land for residential or commercial use, the developer and property owner should be aware of the potential for contaminants to run off-site and into nearby water courses and storm water drains. Products of concern relating to any future development project or land-clearing activity would be earthen material (silt), paints, oils, antifreezes and other fluids from automobile or on-site machinery, or leaks from on-site stocked items.

Opinions and Conclusions:

In order to minimize the regulatory profiling of the subject site as a potential responsible party for any newly discovered groundwater or surface water contamination, future developers should consider implementing conservative, proactive environmental policies during the development planning phase.

Construction managers and developers of any future, on-site development activities should consider implementing aggressive, proactive environmental policies during the development-planning phase. Incorporating best management practices including the use of silt fencing and dust control, secondary containment of all petroleum products, etc. will reduce the possibility of negatively impacting the surface soils, surface waters and/or groundwater resources in the region.

Future land clearing of greater than one (1) acre will likely require both a County of Maui grading/grubbing permit and a National Pollution Discharge Elimination System (NPDES) General Permit (State of Hawaii, Department of Health).

7.2.4 Groundwater Well (See Section 5.5.6)

Findings/Concerns:

One (1) groundwater well is located on the subject property. Department of Lands and Natural Resources' permitting requirements for Well No. 4426-03 were completed.

Opinions and Conclusions:

In order to remain in compliance with the State, this well should be operated and maintained in accordance with applicable federal and state regulations.

The conclusions stated above should not be construed to mean that any regulatory agency would have the same opinion as this author, nor is any implication proposed therefrom.

The results of this environmental assessment are intended for general reference purposes only and are not intended as legal advice. The advice of legal counsel should be sought in regard to individual facts, circumstances and interpretation of environmental liability.

8.0 REFERENCES

8.1 Published References

1. American Standard of Testing and Materials, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process, E1527-05, 2005.
2. "Atlas of Hawaii", 2nd Edition, Department of Geography, University of Hawaii at Hilo, 1983, University of Hawaii Press.
3. "Atlas of Hawaii", 3rd Edition, Department of Geography, University of Hawaii at Hilo, 1998, University of Hawaii Press.
4. County of Maui, Real Property Tax Division, Historical Records for TMK Number (2)-2-2-24:4, 8, 9, 14, 15, 16 portion, 17 portion, 18 & (2)-2-2-2:54 portion.
5. Hawaii Administrative Rules, Title 11, Department of Health, Chapter 58.1, Solid Waste Management Control.
6. State of Hawaii, Department of Health, Solid and Hazardous Waste Branch, Underground Storage Tank Section, List of Leaking Underground Storage Tank Release Sites, January 2007.
7. State of Hawaii, Department of Health, Solid and Hazardous Waste Branch, Underground Storage Tank Section, List of Underground Storage Tank Facilities, January 2007.
8. State of Hawaii, Department of Health, Voluntary Response Program (VRP), List of Voluntary Response Program Sites, July 2006.
9. State of Hawaii, Department of Health, Office of Hazard Evaluation and Emergency Response, List of Release Notifications, July 2006.
10. State of Hawaii, Department of Health, Office of Hazard Evaluation and Emergency Response, List of Sites List, July 2006.
11. State of Hawaii, Department of Land and Natural Resources, Registered Wells and Dry Wells.
12. State of Hawaii, Department of Land and Natural Resources, "State of Hawaii Water Quality Plan and Groundwater Map", June 1990, Revised December 1991.
13. U.S. Department of Agriculture, Soil Conservation Service, "Soil Survey of the Islands of Kauai, Oahu, Maui, Molokai, and Lanai, State of Hawaii", 1972.
14. U.S. Environmental Protection Agency, Office of Air and Radiation et al., Indoor Air Facts No. 4 (revised) Sick Building Syndrome, April 1991.
15. U.S. Environmental Protection Agency, Building Air Quality: A Guide for Building Owners and Facility Managers, 1991.

8.2 Map and Other References

1. Environmental Data Resources, Inc., "The EDR Field Check Report", May 17, 2007.
2. Federal Emergency Management Agency, "Flood Insurance Rate Map", Number 150003 0265C dated September 6, 1989.
3. R.M. Towill Corporation, Aerial Photographs, Honolulu, Hawaii.
4. Air Survey Hawaii, Aerial Photographs, Honolulu, Hawaii.
5. Sanborn Maps (no coverage)
6. U.S. Geological Survey, 7.5 Minute Topographic Map, Puu O Kali, Hawaii 1983 & 1992.

8.3 Record of Personal Communications

Table 3.0. List of personal Interviews conducted by MEV.

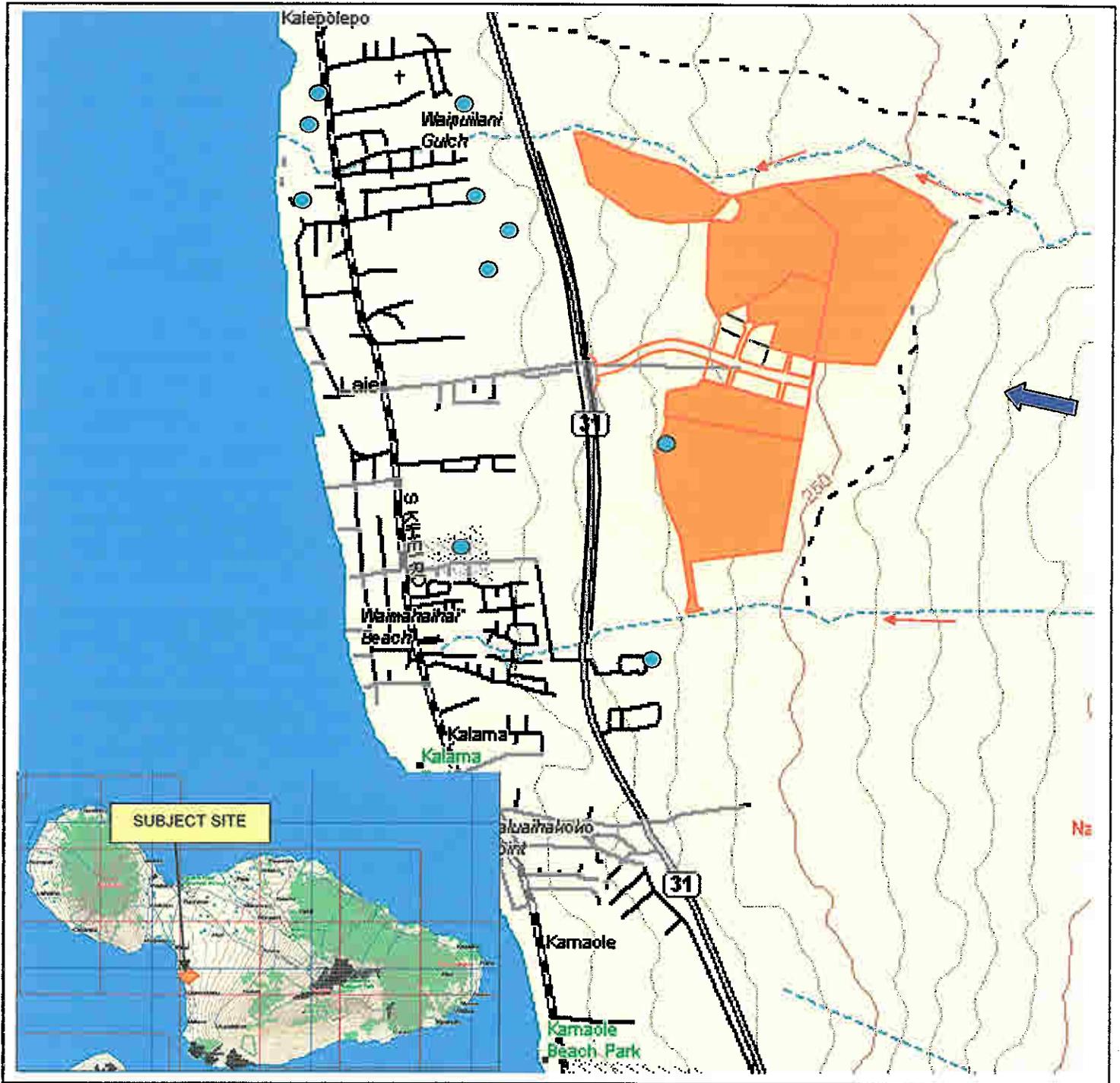
| Date | Interviewee | Title & Organization | Address | Phone Number |
|---------|---------------------|--|---|----------------|
| 3/20/07 | Mr. John Maloney | Pacific Rim Land, Inc | 381 Hukul L'I Place Suite 202 Kihei, HI 96753 | (808) 874-5263 |
| 5/4/07 | Mr. Scott Meidel | Land Manager Haleakala Ranch Co. | 529 Kealaloa Aveue Makawao, HI 96768 | (808) 572-1500 |
| 5/4/07 | Mr. Todd MacFarlane | Project Manager, Goodfellow Brothers, Inc | 500 Welakahao Rd Kihei, HI 96753 | (808) 879-8868 |
| 5/11/07 | Mr. Paul Dega | SCS Archaeology | 711 Kapiolani Blvd Suite 975 Honolulu, HI | (808) 579-1182 |

End of Section

Appendix A:

Maps, Plans, and Photographs

FIGURE 1: REGIONAL SETTING MAP



-  Subject Property (not to scale)
-  Projected Groundwater Flow
-  Regional Surface Water Flow
-  USGS Water Wells (2003)

FIGURE 2: SITE PLAN

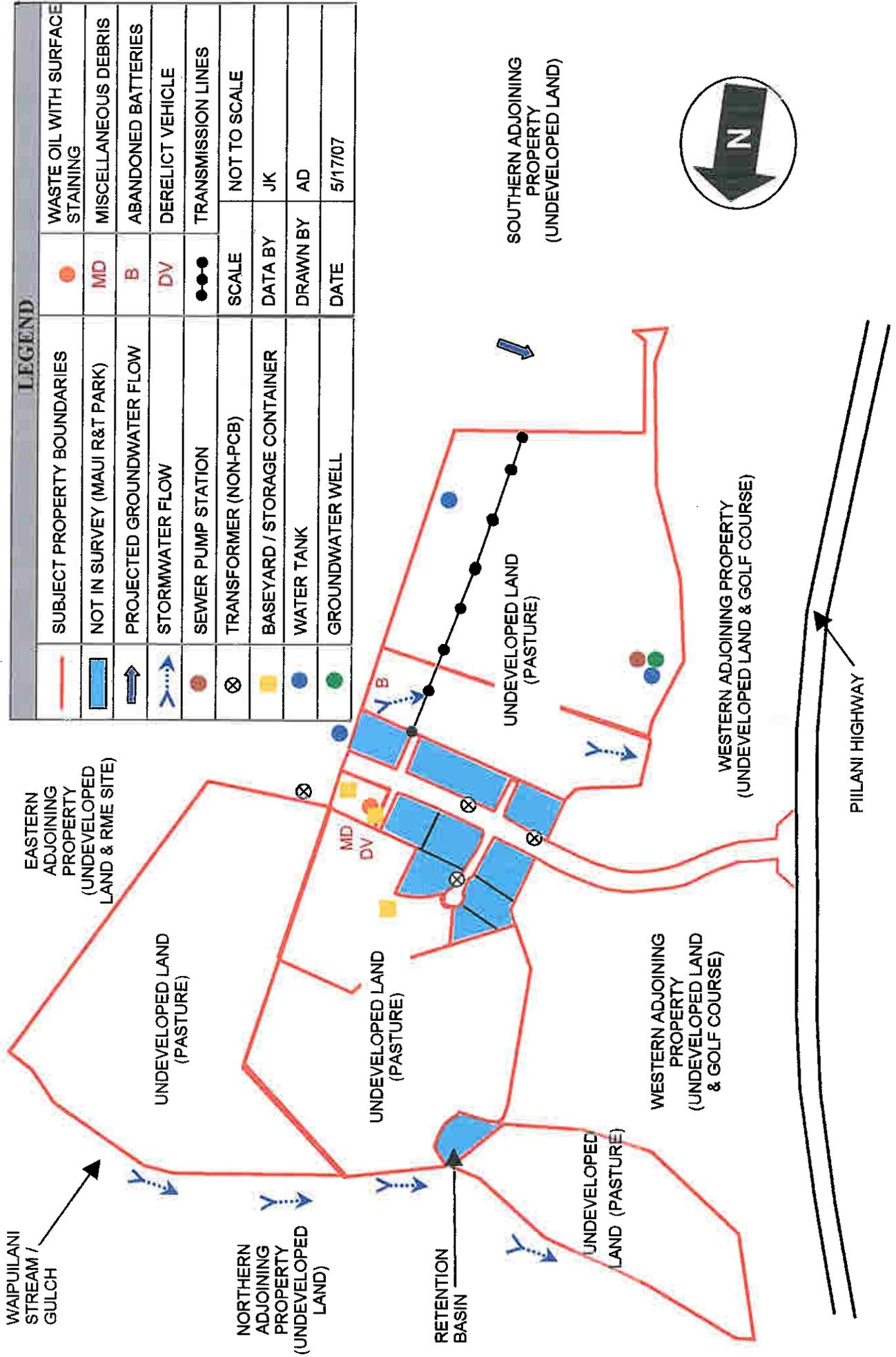


FIGURE 3b: TAX MAP KEY

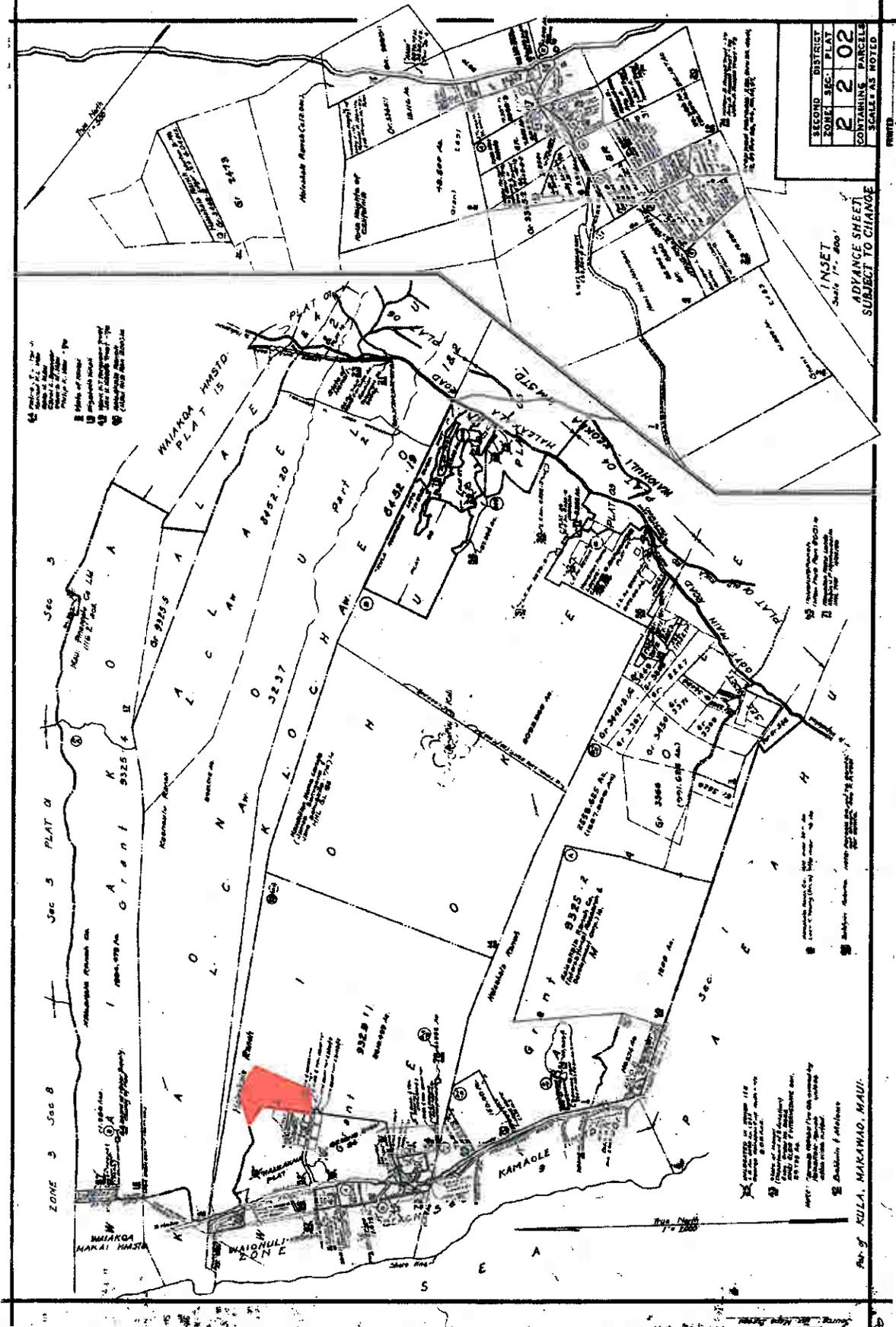


FIGURE 4 – AERIAL PHOTO OF LAND PARCELS

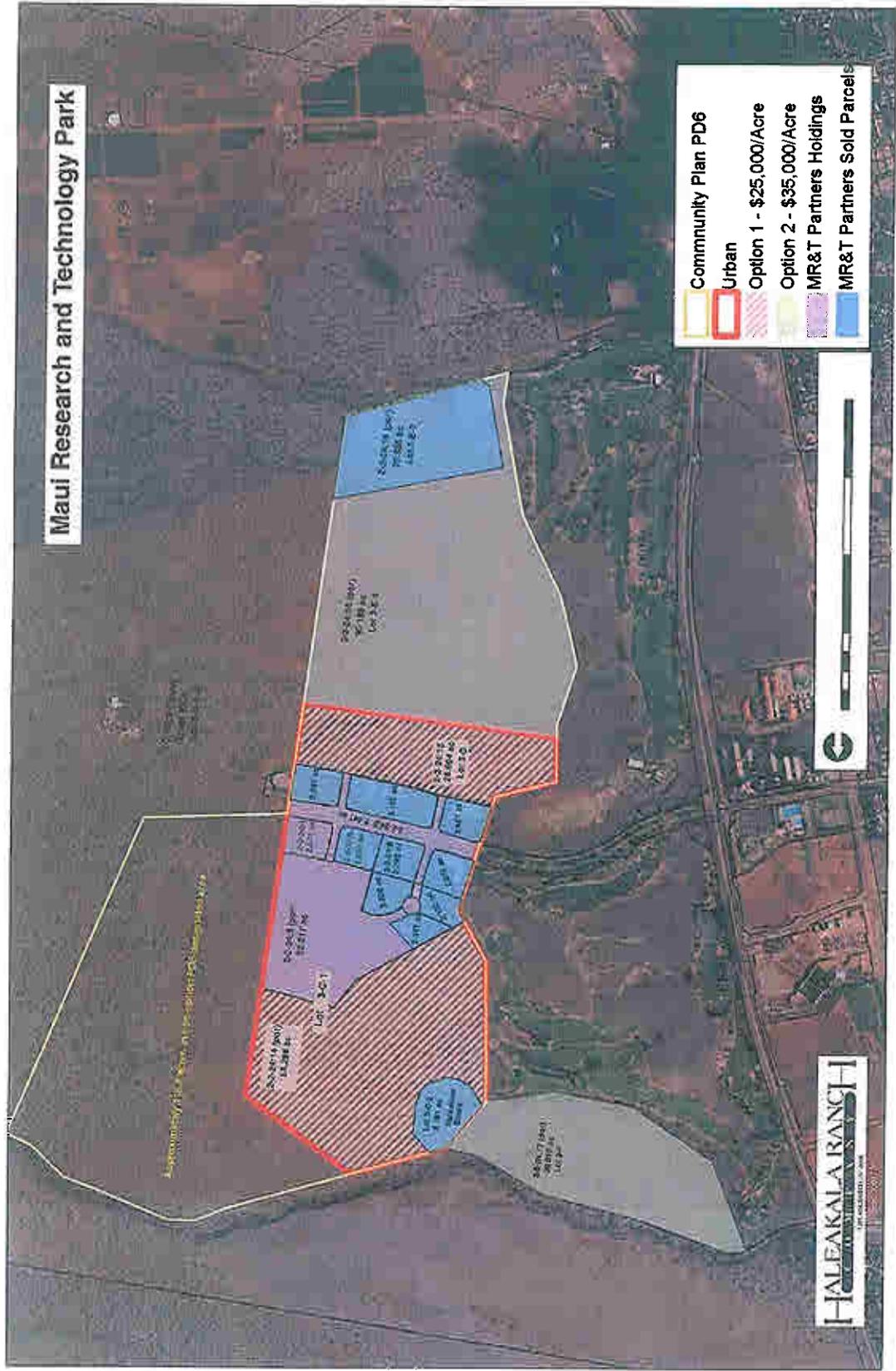


PHOTO SUPPLIED BY PACIFIC RIM LAND, INC.

BLUE AREAS NOT INCLUDED IN PHASE I ESA SURVEY



PHOTO 1

Northeasterly view, across Piilani Highway, of the subject property's entrance. Lipoa Parkway leads to the remaining land parcels of the subject property.



PHOTO 2

Easterly view from Parcel 17 towards the retention basin located on Lot 3-C-2. The basin is not part of the subject property.

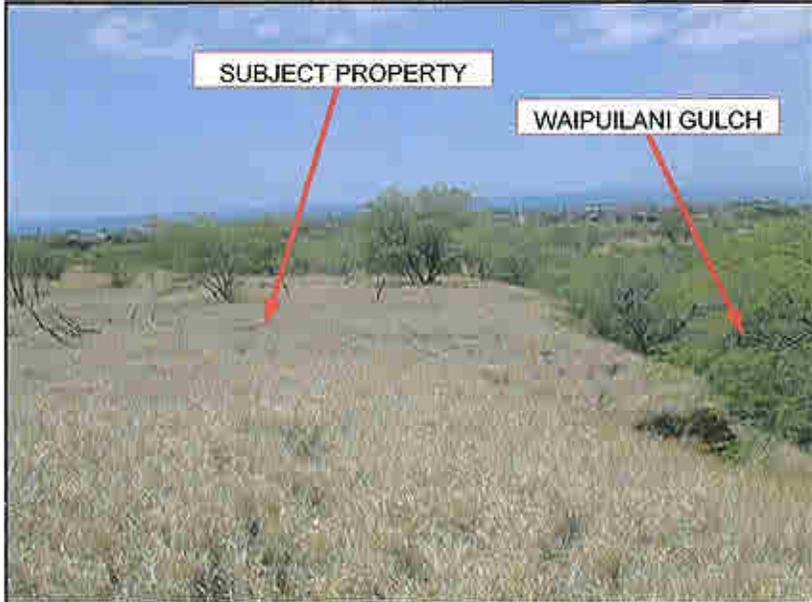


PHOTO 3

Westerly view along the subject property's northern boundary (Parcel 54).



PHOTO 4

Northerly view along an access road dividing Parcel 8 and Parcel 54.

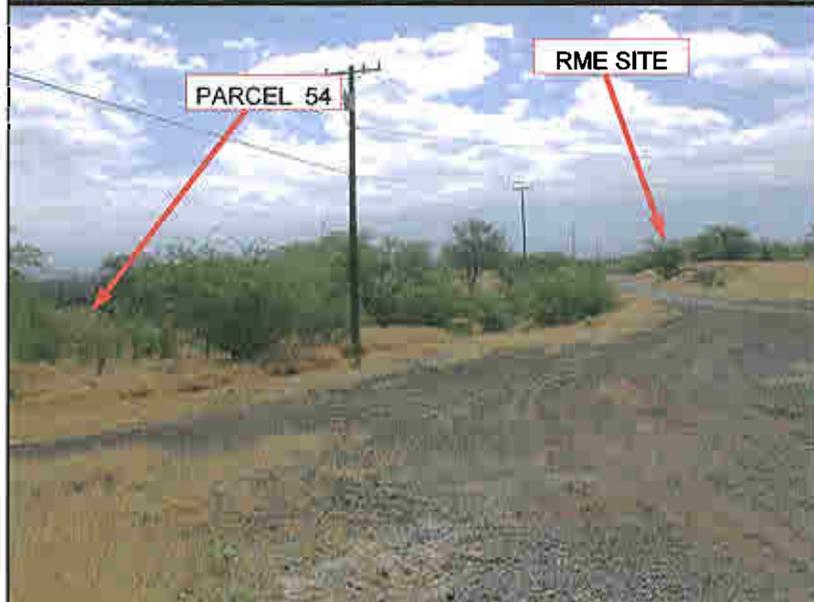


PHOTO 5

Easterly view along the southern boundary of Parcel 54 (portion).

The unpaved road on the right side of the photo leads to the military's RME facility.

The photo is taken from the top end of Lipoa Parkway.

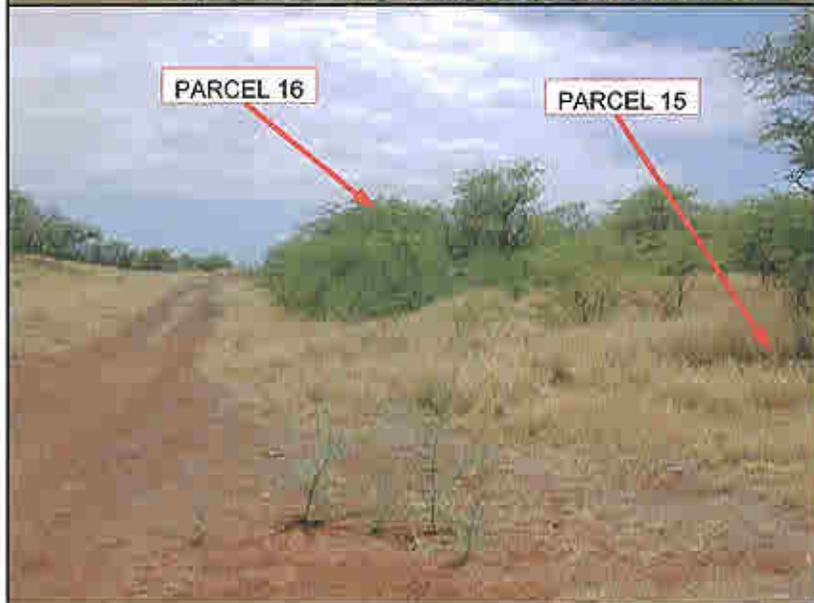


PHOTO 6

Southerly view along the eastern boundaries of Parcel 15 and Parcel 16.

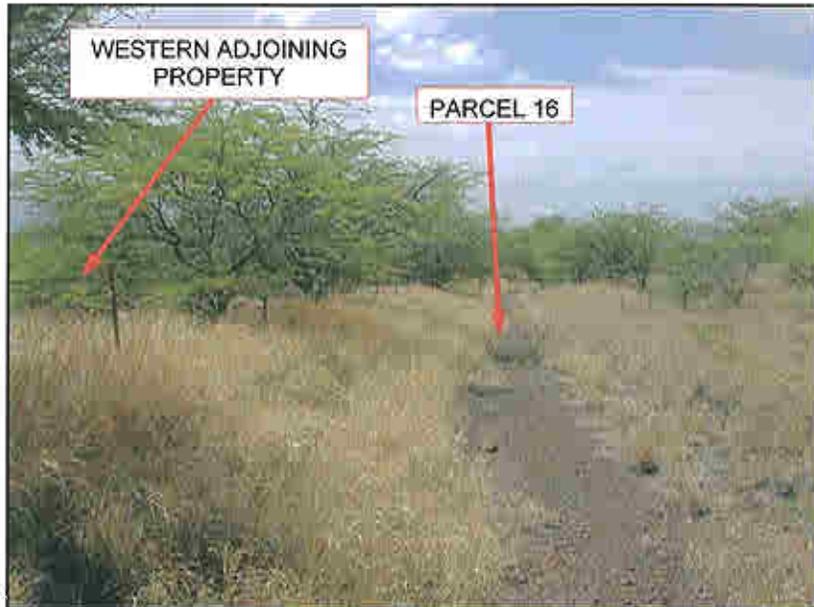


PHOTO 7

Northerly view along the subject property's western boundary.



PHOTO 8

Southerly view along the western boundary of Parcel 8. The adjoining property consists of commercial office space.



PHOTO 9

Westerly view along the eastern portion of Lipoa Parkway. The Goodfellow Bros. Inc. (GBI) baseyard is located in this area.



PHOTO 10

Body shot of the typical terrain and vegetation located on the subject property. View is westerly.



PHOTO 11

GBI's baseyard, including office trailers and limited material stockpiling, is located on Parcel 4 located at the east end of Lipoa Parkway.

The storage/use of hazardous/regulated substances was not noted by MEV in this area.

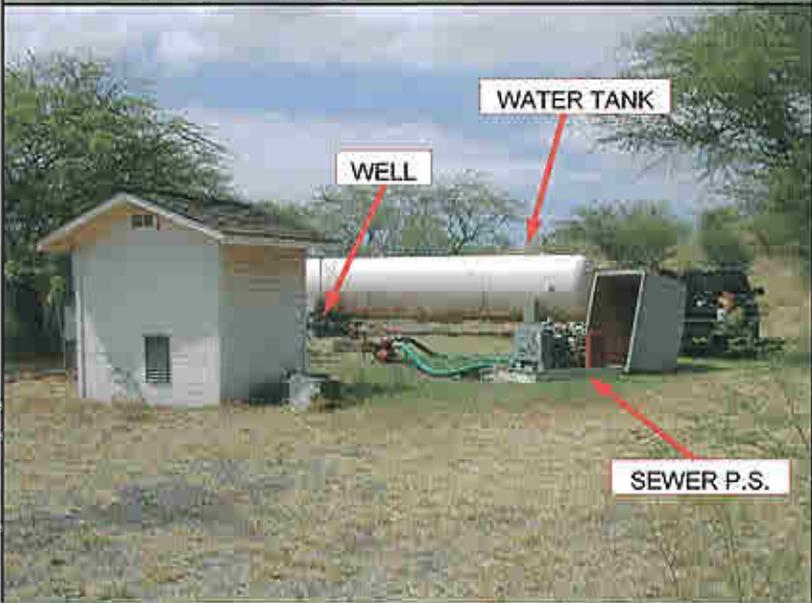


PHOTO 12

Located along the western boundary of Parcel 16 is a groundwater well; water storage tank; sewer pump station (P.S.); pad-mounted transformer; and a small storage shed.

The well supplies irrigation water that is temporarily stored in the water tank. The sewer pump station services the businesses in the Maui Research and Technology Park, pumping sewage to the County's wastewater treatment plant.



PHOTO 13

Baseyard activities are located on a portion of the subject property (Parcel 8). The baseyard is used for construction activities located on the adjoining property. See Photo 14.



PHOTO 14

Storage containers are located on a portion of the subject property (Parcel 8). Limited quantities of hazardous/regulated substances were noted in this area. See Photo 15.



PHOTO 15

This specialized cabinet, located on the back of a storage container (see Photo 14) is used to store flammables. Only limited quantities of flammables were noted by MEV.



PHOTO 16

This storage container is located on the northern portion of Parcel 9. A drip pan and deteriorating poly container containing waste oil are located at this location. These items should be properly managed. See Photo 17.



PHOTO 17

A drip pan containing an oil filter and deteriorated container of waste oil are located under a storage container on-site. See Photo 16 above. The waste oil and containers should be properly managed.

Limited soil staining was evident under and adjacent to the drip pan. The stained soils should be removed and properly disposed of. If the stained soils extend beyond the immediate surface soils, the underlying soils should be tested to confirm all contamination has been effectively removed.



PHOTO 18

Spillage noted at the construction baseyard located on Parcel 8 consisted of concrete only.



PHOTO 19

One (1) waste container is located in the GBI construction baseyard area. The improper disposal of regulated items into the container was not noted by MEV.



PHOTO 20

One (1) derelict vehicle was located on-site (Parcel 8).



PHOTO 21

A limited amount of solid waste dumping was noted by MEV on Parcel 8. Some of these materials included regulated waste items (vehicle tires and parts, white good).



PHOTO 22

A limited amount of solid waste dumping was noted by MEV on Parcel 8. Most of these items consisted of construction debris and household waste.



PHOTO 23

A limited amount of solid waste dumping was noted by MEV on Parcel 8. Some of these materials included regulated waste items (vehicle parts).



PHOTO 24

Three (3) vehicle batteries were abandoned on-site along the eastern boundary of Parcel 16. These batteries should be properly managed (recycled).

Appendix B:

Regulatory Records Documentation Site Specific Documentation

EDR FieldCheck® Report



EDR® Environmental
Data Resources Inc

**Maui Research & Technology Park - Undeveloped Lots
Lipoa Parkway
Kihei, HI 96753**

Inquiry Number: 1930257.1s

May 17, 2007

**The Standard in
Environmental Risk
Information**

440 Wheelers Farms Road
Milford, Connecticut 06461

Nationwide Customer Service

Telephone: 1-800-352-0050
Fax: 1-800-231-6802
Internet: www.edrnet.com

TABLE OF CONTENTS

| <u>SECTION</u> | <u>PAGE</u> |
|---|-------------|
| Executive Summary..... | ES1 |
| Overview Map..... | 2 |
| Detail Map..... | 3 |
| Map Findings Summary..... | 4 |
| Map Findings..... | 6 |
| Orphan Summary..... | 7 |
| Government Records Searched/Data Currency Tracking..... | GR-1 |

GEOCHECK ADDENDUM

GeoCheck - Not Requested

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of the environmental records was conducted by Environmental Data Resources, Inc. (EDR). MEV, LLC used the EDR FieldCheck System to review and/or revise the results of this search, based on independent data verification by MEV, LLC. The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-05) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

LIPOA PARKWAY
KIHEI, HI 96753

COORDINATES

Latitude (North): 20.750400 - 20° 45' 1.4"
Longitude (West): 156.435100 - 156° 26' 6.4"
Universal Transverse Mercator: Zone 4
UTM X (Meters): 767079.1
UTM Y (Meters): 2296507.5
Elevation: 220 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map: 20156-G4 WAILUKU, HI
Most Recent Revision: Not reported

Southwest Map: 20156-F4 MAALAEA, HI
Most Recent Revision: Not reported

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

DATABASES WITH NO MAPPED SITES

No sites were identified in following databases.

FEDERAL RECORDS

NPL..... National Priority List
Proposed NPL..... Proposed National Priority List Sites
Delisted NPL..... National Priority List Deletions
NPL LIENS..... Federal Superfund Liens
CERCLIS..... Comprehensive Environmental Response, Compensation, and Liability Information System
CERC-NFRAP..... CERCLIS No Further Remedial Action Planned
CORRACTS..... Corrective Action Report

EXECUTIVE SUMMARY

| | |
|------------------------|---|
| RCRA-TSDF | Resource Conservation and Recovery Act Information |
| RCRA-LQG | Resource Conservation and Recovery Act Information |
| ERNS | Emergency Response Notification System |
| HMIRS | Hazardous Materials Information Reporting System |
| US ENG CONTROLS | Engineering Controls Sites List |
| US INST CONTROL | Sites with Institutional Controls |
| DOD | Department of Defense Sites |
| FUDS | Formerly Used Defense Sites |
| US BROWNFIELDS | A Listing of Brownfields Sites |
| CONSENT | Superfund (CERCLA) Consent Decrees |
| ROD | Records Of Decision |
| UMTRA | Uranium Mill Tailings Sites |
| ODI | Open Dump Inventory |
| TRIS | Toxic Chemical Release Inventory System |
| TSCA | Toxic Substances Control Act |
| FTTS | FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act) |
| SSTS | Section 7 Tracking Systems |
| US CDL | Clandestine Drug Labs |
| DOT OPS | Incident and Accident Data |
| RADINFO | Radiation Information Database |
| HIST FTTS | FIFRA/TSCA Tracking System Administrative Case Listing |
| LUCIS | Land Use Control Information System |
| LIENS 2 | CERCLA Lien Information |
| ICIS | Integrated Compliance Information System |
| PADS | PCB Activity Database System |
| MLTS | Material Licensing Tracking System |
| MINES | Mines Master Index File |
| FINDS | Facility Index System/Facility Registry System |
| RAATS | RCRA Administrative Action Tracking System |

STATE AND LOCAL RECORDS

| | |
|---------------------|--|
| SHWS | Sites List |
| SWF/LF | Permitted Landfills in the State of Hawaii |
| LUST | Leaking Underground Storage Tank Database |
| UST | Underground Storage Tank Database |
| SPILLS | Release Notifications |
| INST CONTROL | Sites with Institutional Controls |
| VCP | Voluntary Response Program Sites |
| DRYCLEANERS | Permitted Drycleaner Facility Listing |
| BROWNFIELDS | Brownfields Sites |
| AIRS | List of Permitted Facilities |

TRIBAL RECORDS

| | |
|----------------------|--|
| INDIAN RESERV | Indian Reservations |
| INDIAN LUST | Leaking Underground Storage Tanks on Indian Land |
| INDIAN UST | Underground Storage Tanks on Indian Land |

EDR PROPRIETARY RECORDS

| | |
|--------------------------------|---|
| Manufactured Gas Plants | EDR Proprietary Manufactured Gas Plants |
|--------------------------------|---|

EXECUTIVE SUMMARY

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property. Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

FEDERAL RECORDS

RCRAInfo: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. RCRAInfo replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System(RCRIS). The database includes selective information on sites which generate, transport, store , treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month. Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month Large quantity generators generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month. Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

An online review and analysis by MEV, LLC of the RCRA-SQG list, as provided by EDR, and dated 06/13/2006 has revealed that there is 1 RCRA-SQG site within approximately 0.25 miles of the target property.

| <u>Lower Elevation</u> | <u>Address</u> | <u>Dist / Dir</u> | <u>Map ID</u> | <u>Page</u> |
|------------------------|-------------------|-------------------|---------------|-------------|
| TREX HAWAII LLC | 590 LIPOA PARKWAY | 1/8 - 1/4 WSW 1 | | 6 |

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped:

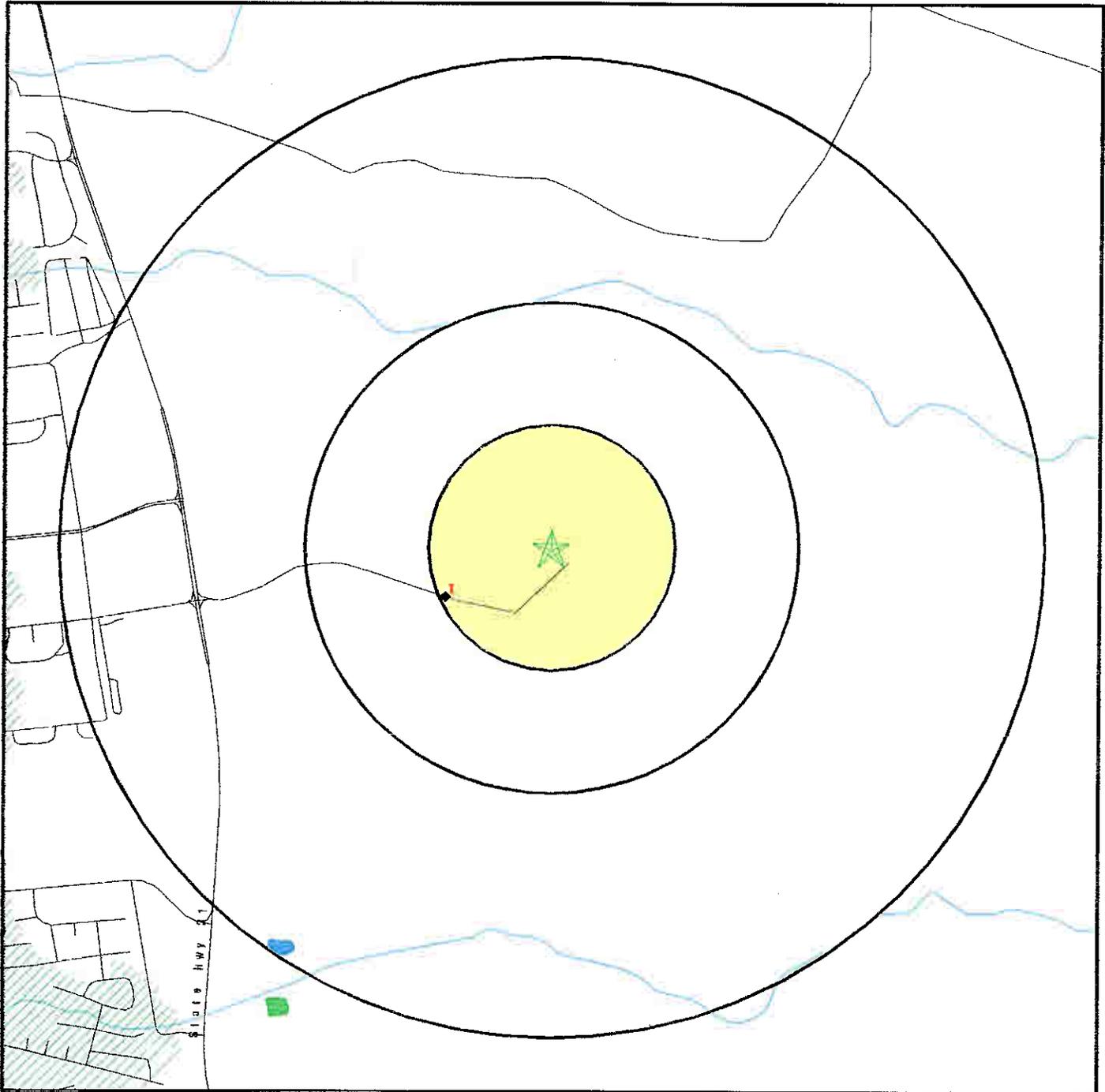
Site Name

KAHOOLAWE ISLAND
MAUI OCEAN CENTER
MAUI ECONOMIC DEVELOPMENT BRD
MAUI NUI PARK
100 YARDS OFF SHORE OF KIHEI MAUI
MAUI ELEC-MAALAEA GEN STATION

Database(s)

CERCLIS
FINDS
FINDS
FINDS
SPILLS
HAZNET, HAZNET

OVERVIEW MAP - 1930257.1s

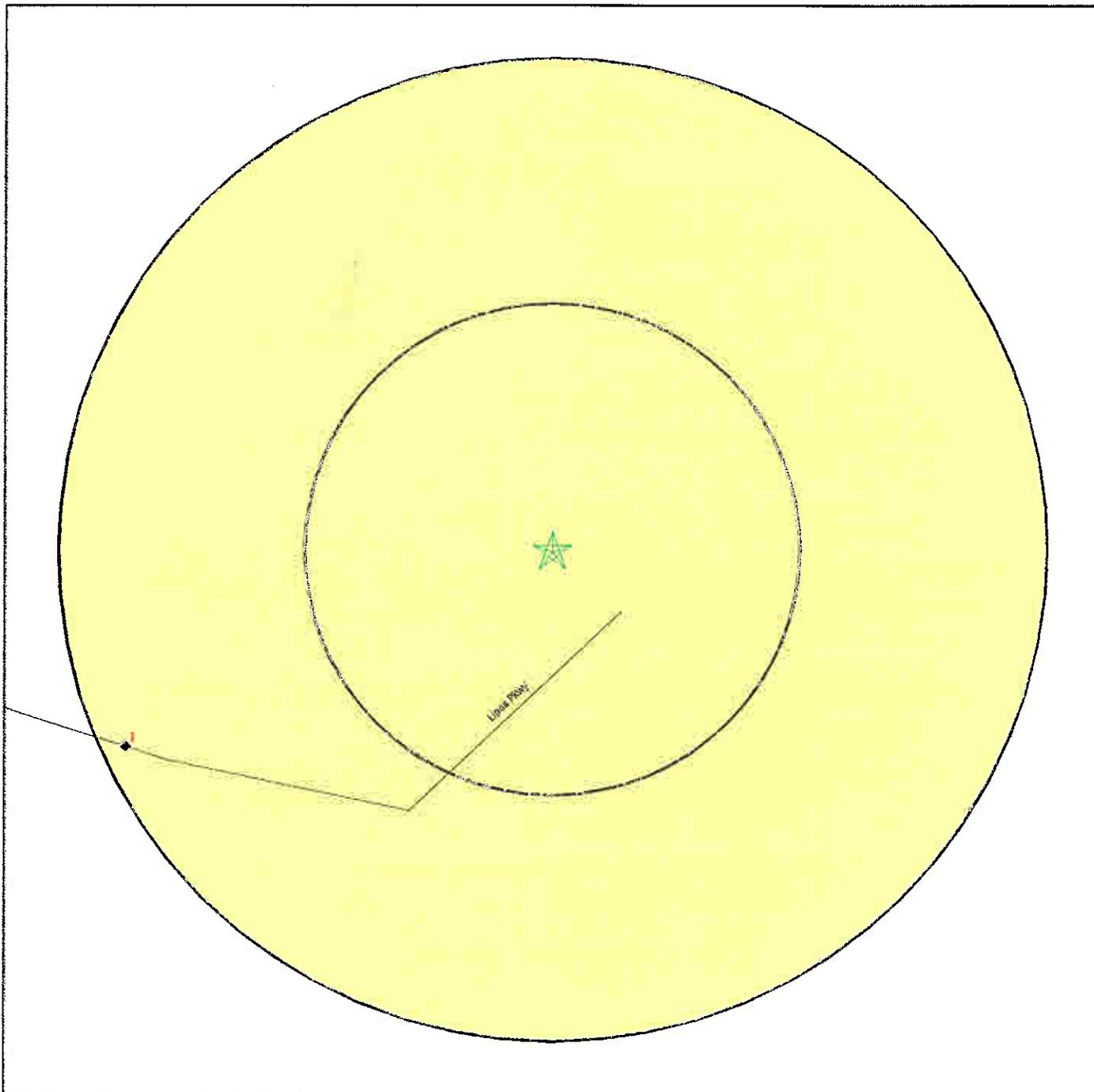


-  Target Property
-  Sites at elevations higher than or equal to the target property
-  Sites at elevations lower than the target property
-  Manufactured Gas Plants
-  National Priority List Sites
-  Dept. Defense Sites
-  Indian Reservations BIA
-  Oil & Gas pipelines
-  100-year flood zone
-  500-year flood zone
-  National Wetland Inventory

SITE NAME: Maui Research & Technology Park - Undeveloped Lots
ADDRESS: Lipoa Parkway
 Kihel HI 96753
LAT/LONG: 20.7504 / 156.4351

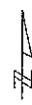
CLIENT: MEV, LLC
CONTACT: J. Kermode
INQUIRY #: 1930257.1s
DATE: May 17, 2007 11:41 am

DETAIL MAP - 1930257.1s



-  Target Property
-  Sites at elevations higher than or equal to the target property
-  Sites at elevations lower than the target property
-  Manufactured Gas Plants
-  Sensitive Receptors
-  National Priority List Sites
-  Dept. Defense Sites

-  Indian Reservations BIA
-  Oil & Gas pipelines
-  100-year flood zone
-  500-year flood zone



SITE NAME: Maui Research & Technology Park - Undeveloped Lots
ADDRESS: Lipoa Parkway
 Kihel HI 96753
LAT/LONG: 20.7504 / 156.4351

CLIENT: MEV, LLC
CONTACT: J. Kermode
INQUIRY #: 1930257.1s
DATE: May 17, 2007 11:41 am

MAP FINDINGS SUMMARY

| Database | Target Property | Search Distance (Miles) | < 1/8 | 1/8 - 1/4 | 1/4 - 1/2 | 1/2 - 1 | > 1 | Total Plotted |
|---------------------------------------|-----------------|-------------------------|-------|-----------|-----------|---------|-----|---------------|
| <u>FEDERAL RECORDS</u> | | | | | | | | |
| NPL | | 1.000 | 0 | 0 | 0 | 0 | NR | 0 |
| Proposed NPL | | 1.000 | 0 | 0 | 0 | 0 | NR | 0 |
| Delisted NPL | | 1.000 | 0 | 0 | 0 | 0 | NR | 0 |
| NPL LIENS | TP | | NR | NR | NR | NR | NR | 0 |
| CERCLIS | | 0.500 | 0 | 0 | 0 | NR | NR | 0 |
| CERC-NFRAP | | 0.500 | 0 | 0 | 0 | NR | NR | 0 |
| CORRACTS | | 1.000 | 0 | 0 | 0 | 0 | NR | 0 |
| RCRA TSD | | 0.500 | 0 | 0 | 0 | NR | NR | 0 |
| RCRA Lg. Quan. Gen. | | 0.250 | 0 | 0 | NR | NR | NR | 0 |
| RCRA Sm. Quan. Gen. | | 0.250 | 0 | 1 | NR | NR | NR | 1 |
| ERNS | TP | | NR | NR | NR | NR | NR | 0 |
| HMIRS | TP | | NR | NR | NR | NR | NR | 0 |
| US ENG CONTROLS | | 0.500 | 0 | 0 | 0 | NR | NR | 0 |
| US INST CONTROL | | 0.500 | 0 | 0 | 0 | NR | NR | 0 |
| DOD | | 1.000 | 0 | 0 | 0 | 0 | NR | 0 |
| FUDS | | 1.000 | 0 | 0 | 0 | 0 | NR | 0 |
| US BROWNFIELDS | | 0.500 | 0 | 0 | 0 | NR | NR | 0 |
| CONSENT | | 1.000 | 0 | 0 | 0 | 0 | NR | 0 |
| ROD | | 1.000 | 0 | 0 | 0 | 0 | NR | 0 |
| UMTRA | | 0.500 | 0 | 0 | 0 | NR | NR | 0 |
| ODI | | 0.500 | 0 | 0 | 0 | NR | NR | 0 |
| TRIS | TP | | NR | NR | NR | NR | NR | 0 |
| TSCA | TP | | NR | NR | NR | NR | NR | 0 |
| FTTS | TP | | NR | NR | NR | NR | NR | 0 |
| SSTS | TP | | NR | NR | NR | NR | NR | 0 |
| CDL | TP | | NR | NR | NR | NR | NR | 0 |
| DOT OPS | TP | | NR | NR | NR | NR | NR | 0 |
| RADINFO | TP | | NR | NR | NR | NR | NR | 0 |
| HIST FTTS | TP | | NR | NR | NR | NR | NR | 0 |
| LUCIS | | 0.500 | 0 | 0 | 0 | NR | NR | 0 |
| LIENS 2 | TP | | NR | NR | NR | NR | NR | 0 |
| ICIS | TP | | NR | NR | NR | NR | NR | 0 |
| PADS | TP | | NR | NR | NR | NR | NR | 0 |
| MLTS | TP | | NR | NR | NR | NR | NR | 0 |
| MINES | | 0.250 | 0 | 0 | NR | NR | NR | 0 |
| FINDS | TP | | NR | NR | NR | NR | NR | 0 |
| RAATS | TP | | NR | NR | NR | NR | NR | 0 |
| <u>STATE AND LOCAL RECORDS</u> | | | | | | | | |
| SHWS | | 1.000 | 0 | 0 | 0 | 0 | NR | 0 |
| State Landfill | | 0.500 | 0 | 0 | 0 | NR | NR | 0 |
| LUST | | 0.500 | 0 | 0 | 0 | NR | NR | 0 |
| UST | | 0.250 | 0 | 0 | NR | NR | NR | 0 |
| SPILLS | TP | | NR | NR | NR | NR | NR | 0 |
| INST CONTROL | | 0.500 | 0 | 0 | 0 | NR | NR | 0 |
| VCP | | 0.500 | 0 | 0 | 0 | NR | NR | 0 |
| DRYCLEANERS | | 0.250 | 0 | 0 | NR | NR | NR | 0 |

MAP FINDINGS SUMMARY

| <u>Database</u> | <u>Target Property</u> | <u>Search Distance (Miles)</u> | <u>< 1/8</u> | <u>1/8 - 1/4</u> | <u>1/4 - 1/2</u> | <u>1/2 - 1</u> | <u>> 1</u> | <u>Total Plotted</u> |
|---------------------------------------|------------------------|--------------------------------|-----------------|------------------|------------------|----------------|---------------|----------------------|
| BROWNFIELDS | | 0.500 | 0 | 0 | 0 | NR | NR | 0 |
| AIRS | TP | | NR | NR | NR | NR | NR | 0 |
| <u>TRIBAL RECORDS</u> | | | | | | | | |
| INDIAN RESERV | | 1.000 | 0 | 0 | 0 | 0 | NR | 0 |
| INDIAN LUST | | 0.500 | 0 | 0 | 0 | NR | NR | 0 |
| INDIAN UST | | 0.250 | 0 | 0 | NR | NR | NR | 0 |
| <u>EDR PROPRIETARY RECORDS</u> | | | | | | | | |
| Manufactured Gas Plants | | 1.000 | 0 | 0 | 0 | 0 | NR | 0 |

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

MAP FINDINGS

Map ID
Direction
Distance
Distance (ft.)
Elevation

Site

Database(s) EDR ID Number
EPA ID Number

1 **TREX HAWAII LLC**
WSW **590 LIPOA PARKWAY**
1/8-1/4 **KIHEI, HI 96753**
1254 ft.

RCRA-SQG **1007989525**
HIR000136333

Relative:
Lower

RCRAInfo:

Owner: TREX HAWAII LLC
EPA ID: HIR000136333

Actual:
196 ft.

Contact: MICHAEL ABRAHAM
808-442-7015

Classification: Small Quantity Generator
TSDf Activities: Not reported

Violation Status: No violations found

ORPHAN SUMMARY

| City | EDR ID | Site Name | Site Address | Zip | Database(s) |
|-------------|------------|-----------------------------------|----------------------------------|-------|----------------|
| KIHEI | S108008651 | 100 YARDS OFF SHORE OF KIHEI MAUI | KIHEI ROAD | 96753 | SPILLS |
| KIHEI | 1000486449 | KAHOOLAWE ISLAND | LAT 20 32' 30", LONG 156 37' 30" | 96753 | CERCLIS |
| KIHEI | 1005505462 | MAUI OCEAN CENTER | MAALAEA HARBOR | 96753 | FINDS |
| KIHEI | S106084485 | MAUI ELEC-MAALAEA GEN STATION | 3 MI NW KIHEI HWT 30 | 96753 | HAZNET, HAZNET |
| KIHEI | 1008170106 | MAUI ECONOMIC DEVELOPMENT BRD | 1151 PUNCHBOWL ST, ROOM 431 | 96753 | FINDS |
| KIHEI, MAUI | 1008170126 | MAUI NIUI PARK | KAMEHAMEHA HWY | 96753 | FINDS |

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

FEDERAL RECORDS

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

| | |
|---|--|
| Date of Government Version: 01/25/2007 | Source: EPA |
| Date Data Arrived at EDR: 01/31/2007 | Telephone: N/A |
| Date Made Active in Reports: 03/12/2007 | Last EDR Contact: 05/03/2007 |
| Number of Days to Update: 40 | Next Scheduled EDR Contact: 07/30/2007 |
| | Data Release Frequency: Quarterly |

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

| | |
|---|--|
| Date of Government Version: 09/27/2006 | Source: EPA |
| Date Data Arrived at EDR: 11/01/2006 | Telephone: N/A |
| Date Made Active in Reports: 11/22/2006 | Last EDR Contact: 05/03/2007 |
| Number of Days to Update: 21 | Next Scheduled EDR Contact: 07/30/2007 |
| | Data Release Frequency: Quarterly |

DELISTED NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

| | |
|---|--|
| Date of Government Version: 12/28/2006 | Source: EPA |
| Date Data Arrived at EDR: 01/31/2007 | Telephone: N/A |
| Date Made Active in Reports: 03/12/2007 | Last EDR Contact: 05/03/2007 |
| Number of Days to Update: 40 | Next Scheduled EDR Contact: 07/30/2007 |
| | Data Release Frequency: Quarterly |

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

| | |
|---|---|
| Date of Government Version: 10/15/1991 | Source: EPA |
| Date Data Arrived at EDR: 02/02/1994 | Telephone: 202-564-4267 |
| Date Made Active in Reports: 03/30/1994 | Last EDR Contact: 03/26/2007 |
| Number of Days to Update: 56 | Next Scheduled EDR Contact: 05/21/2007 |
| | Data Release Frequency: No Update Planned |

CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System

CERCLIS contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

| | |
|---|--|
| Date of Government Version: 02/27/2007 | Source: EPA |
| Date Data Arrived at EDR: 03/21/2007 | Telephone: 703-603-8960 |
| Date Made Active in Reports: 04/27/2007 | Last EDR Contact: 03/21/2007 |
| Number of Days to Update: 37 | Next Scheduled EDR Contact: 06/18/2007 |
| | Data Release Frequency: Quarterly |

CERCLIS-NFRAP: CERCLIS No Further Remedial Action Planned

Archived sites are sites that have been removed and archived from the inventory of CERCLIS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list this site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

| | |
|---|--|
| Date of Government Version: 12/20/2006 | Source: EPA |
| Date Data Arrived at EDR: 01/29/2007 | Telephone: 703-603-8960 |
| Date Made Active in Reports: 02/27/2007 | Last EDR Contact: 03/19/2007 |
| Number of Days to Update: 29 | Next Scheduled EDR Contact: 06/18/2007 |
| | Data Release Frequency: Quarterly |

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

| | |
|---|--|
| Date of Government Version: 03/14/2007 | Source: EPA |
| Date Data Arrived at EDR: 03/20/2007 | Telephone: 800-424-9346 |
| Date Made Active in Reports: 04/27/2007 | Last EDR Contact: 03/05/2007 |
| Number of Days to Update: 38 | Next Scheduled EDR Contact: 06/04/2007 |
| | Data Release Frequency: Quarterly |

RCRA: Resource Conservation and Recovery Act Information

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. RCRAInfo replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System (RCRIS). The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month. Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month. Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month. Transporters are individuals or entities that move hazardous waste from the generator off-site to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

| | |
|---|--|
| Date of Government Version: 06/13/2006 | Source: EPA |
| Date Data Arrived at EDR: 06/28/2006 | Telephone: (415) 495-8895 |
| Date Made Active in Reports: 08/23/2006 | Last EDR Contact: 05/16/2007 |
| Number of Days to Update: 56 | Next Scheduled EDR Contact: 07/16/2007 |
| | Data Release Frequency: Quarterly |

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

| | |
|---|---|
| Date of Government Version: 12/31/2006 | Source: National Response Center, United States Coast Guard |
| Date Data Arrived at EDR: 01/24/2007 | Telephone: 202-267-2180 |
| Date Made Active in Reports: 03/12/2007 | Last EDR Contact: 04/24/2007 |
| Number of Days to Update: 47 | Next Scheduled EDR Contact: 07/23/2007 |
| | Data Release Frequency: Annually |

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

| | |
|---|---|
| Date of Government Version: 12/31/2005 | Source: U.S. Department of Transportation |
| Date Data Arrived at EDR: 04/17/2007 | Telephone: 202-366-4555 |
| Date Made Active in Reports: 05/14/2007 | Last EDR Contact: 04/17/2007 |
| Number of Days to Update: 27 | Next Scheduled EDR Contact: 07/16/2007 |
| | Data Release Frequency: Annually |

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

| | |
|---|---|
| Date of Government Version: 01/24/2007 | Source: Environmental Protection Agency |
| Date Data Arrived at EDR: 01/31/2007 | Telephone: 703-603-8905 |
| Date Made Active in Reports: 04/04/2007 | Last EDR Contact: 04/02/2007 |
| Number of Days to Update: 63 | Next Scheduled EDR Contact: 07/02/2007 |
| | Data Release Frequency: Varies |

US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

| | |
|---|---|
| Date of Government Version: 01/24/2007 | Source: Environmental Protection Agency |
| Date Data Arrived at EDR: 01/31/2007 | Telephone: 703-603-8905 |
| Date Made Active in Reports: 02/27/2007 | Last EDR Contact: 04/02/2007 |
| Number of Days to Update: 27 | Next Scheduled EDR Contact: 07/02/2007 |
| | Data Release Frequency: Varies |

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

| | |
|---|--|
| Date of Government Version: 12/31/2005 | Source: USGS |
| Date Data Arrived at EDR: 11/10/2006 | Telephone: 703-692-8801 |
| Date Made Active in Reports: 01/11/2007 | Last EDR Contact: 05/11/2007 |
| Number of Days to Update: 62 | Next Scheduled EDR Contact: 08/06/2007 |
| | Data Release Frequency: Semi-Annually |

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

| | |
|---|--|
| Date of Government Version: 12/31/2005 | Source: U.S. Army Corps of Engineers |
| Date Data Arrived at EDR: 09/20/2006 | Telephone: 202-528-4285 |
| Date Made Active in Reports: 11/22/2006 | Last EDR Contact: 04/02/2007 |
| Number of Days to Update: 63 | Next Scheduled EDR Contact: 07/02/2007 |
| | Data Release Frequency: Varies |

US BROWNFIELDS: A Listing of Brownfields Sites

Included in the listing are brownfields properties addresses by Cooperative Agreement Recipients and brownfields properties addressed by Targeted Brownfields Assessments. Targeted Brownfields Assessments-EPA's Targeted Brownfields Assessments (TBA) program is designed to help states, tribes, and municipalities--especially those without EPA Brownfields Assessment Demonstration Pilots--minimize the uncertainties of contamination often associated with brownfields. Under the TBA program, EPA provides funding and/or technical assistance for environmental assessments at brownfields sites throughout the country. Targeted Brownfields Assessments supplement and work with other efforts under EPA's Brownfields Initiative to promote cleanup and redevelopment of brownfields. Cooperative Agreement Recipients-States, political subdivisions, territories, and Indian tribes become Brownfields Cleanup Revolving Loan Fund (BCRLF) cooperative agreement recipients when they enter into BCRLF cooperative agreements with the U.S. EPA. EPA selects BCRLF cooperative agreement recipients based on a proposal and application process. BCRLF cooperative agreement recipients must use EPA funds provided through BCRLF cooperative agreement for specified brownfields-related cleanup activities.

| | |
|---|---|
| Date of Government Version: 01/29/2007 | Source: Environmental Protection Agency |
| Date Data Arrived at EDR: 01/31/2007 | Telephone: 202-566-2777 |
| Date Made Active in Reports: 04/04/2007 | Last EDR Contact: 03/12/2007 |
| Number of Days to Update: 63 | Next Scheduled EDR Contact: 06/11/2007 |
| | Data Release Frequency: Semi-Annually |

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

| | |
|---|---|
| Date of Government Version: 08/23/2006 | Source: Department of Justice, Consent Decree Library |
| Date Data Arrived at EDR: 03/06/2007 | Telephone: Varies |
| Date Made Active in Reports: 04/10/2007 | Last EDR Contact: 04/23/2007 |
| Number of Days to Update: 35 | Next Scheduled EDR Contact: 07/23/2007 |
| | Data Release Frequency: Varies |

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

| | |
|---|--|
| Date of Government Version: 03/27/2007 | Source: EPA |
| Date Data Arrived at EDR: 03/27/2007 | Telephone: 703-416-0223 |
| Date Made Active in Reports: 04/27/2007 | Last EDR Contact: 03/27/2007 |
| Number of Days to Update: 31 | Next Scheduled EDR Contact: 07/02/2007 |
| | Data Release Frequency: Annually |

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

| | |
|---|--|
| Date of Government Version: 12/31/2005 | Source: Department of Energy |
| Date Data Arrived at EDR: 11/08/2006 | Telephone: 505-845-0011 |
| Date Made Active in Reports: 01/29/2007 | Last EDR Contact: 05/17/2007 |
| Number of Days to Update: 82 | Next Scheduled EDR Contact: 06/18/2007 |
| | Data Release Frequency: Varies |

ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

| | |
|---|---|
| Date of Government Version: 06/30/1985 | Source: Environmental Protection Agency |
| Date Data Arrived at EDR: 08/09/2004 | Telephone: 800-424-9346 |
| Date Made Active in Reports: 09/17/2004 | Last EDR Contact: 06/09/2004 |
| Number of Days to Update: 39 | Next Scheduled EDR Contact: N/A |
| | Data Release Frequency: No Update Planned |

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

| | |
|---|--|
| Date of Government Version: 12/31/2004 | Source: EPA |
| Date Data Arrived at EDR: 06/22/2006 | Telephone: 202-566-0250 |
| Date Made Active in Reports: 08/23/2006 | Last EDR Contact: 04/27/2007 |
| Number of Days to Update: 62 | Next Scheduled EDR Contact: 06/18/2007 |
| | Data Release Frequency: Annually |

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

| | |
|---|--|
| Date of Government Version: 12/31/2002 | Source: EPA |
| Date Data Arrived at EDR: 04/14/2006 | Telephone: 202-260-5521 |
| Date Made Active in Reports: 05/30/2006 | Last EDR Contact: 04/16/2007 |
| Number of Days to Update: 46 | Next Scheduled EDR Contact: 07/16/2007 |
| | Data Release Frequency: Every 4 Years |

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

| | |
|---|---|
| Date of Government Version: 02/26/2007 | Source: EPA/Office of Prevention, Pesticides and Toxic Substances |
| Date Data Arrived at EDR: 03/01/2007 | Telephone: 202-566-1667 |
| Date Made Active in Reports: 04/10/2007 | Last EDR Contact: 03/19/2007 |
| Number of Days to Update: 40 | Next Scheduled EDR Contact: 06/18/2007 |
| | Data Release Frequency: Quarterly |

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act) A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

| | |
|---|--|
| Date of Government Version: 02/26/2007 | Source: EPA |
| Date Data Arrived at EDR: 03/01/2007 | Telephone: 202-566-1667 |
| Date Made Active in Reports: 04/10/2007 | Last EDR Contact: 03/19/2007 |
| Number of Days to Update: 40 | Next Scheduled EDR Contact: 06/18/2007 |
| | Data Release Frequency: Quarterly |

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

| | |
|---|--|
| Date of Government Version: 12/31/2005 | Source: EPA |
| Date Data Arrived at EDR: 03/13/2007 | Telephone: 202-564-4203 |
| Date Made Active in Reports: 04/27/2007 | Last EDR Contact: 04/12/2007 |
| Number of Days to Update: 45 | Next Scheduled EDR Contact: 07/16/2007 |
| | Data Release Frequency: Annually |

LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

| | |
|---|---|
| Date of Government Version: 03/08/2007 | Source: Environmental Protection Agency |
| Date Data Arrived at EDR: 04/12/2007 | Telephone: 202-564-6023 |
| Date Made Active in Reports: 05/14/2007 | Last EDR Contact: 02/20/2007 |
| Number of Days to Update: 32 | Next Scheduled EDR Contact: 05/21/2007 |
| | Data Release Frequency: Varies |

RADINFO: Radiation Information Database

The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

| | |
|---|---|
| Date of Government Version: 01/30/2007 | Source: Environmental Protection Agency |
| Date Data Arrived at EDR: 01/31/2007 | Telephone: 202-343-9775 |
| Date Made Active in Reports: 02/27/2007 | Last EDR Contact: 05/03/2007 |
| Number of Days to Update: 27 | Next Scheduled EDR Contact: 07/30/2007 |
| | Data Release Frequency: Quarterly |

CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

| | |
|---|---|
| Date of Government Version: 12/01/2006 | Source: Drug Enforcement Administration |
| Date Data Arrived at EDR: 01/08/2007 | Telephone: 202-307-1000 |
| Date Made Active in Reports: 01/11/2007 | Last EDR Contact: 05/11/2007 |
| Number of Days to Update: 3 | Next Scheduled EDR Contact: 06/25/2007 |
| | Data Release Frequency: Quarterly |

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing

A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

| | |
|---|---|
| Date of Government Version: 10/19/2006 | Source: Environmental Protection Agency |
| Date Data Arrived at EDR: 03/01/2007 | Telephone: 202-564-2501 |
| Date Made Active in Reports: 04/10/2007 | Last EDR Contact: 03/19/2007 |
| Number of Days to Update: 40 | Next Scheduled EDR Contact: 06/18/2007 |
| | Data Release Frequency: No Update Planned |

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

| | |
|---|---|
| Date of Government Version: 02/21/2007 | Source: Environmental Protection Agency |
| Date Data Arrived at EDR: 04/03/2007 | Telephone: 202-564-5088 |
| Date Made Active in Reports: 05/14/2007 | Last EDR Contact: 04/16/2007 |
| Number of Days to Update: 41 | Next Scheduled EDR Contact: 07/16/2007 |
| | Data Release Frequency: Quarterly |

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

| | |
|---|--|
| Date of Government Version: 12/09/2005 | Source: Department of the Navy |
| Date Data Arrived at EDR: 12/11/2006 | Telephone: 843-820-7326 |
| Date Made Active in Reports: 01/11/2007 | Last EDR Contact: 03/26/2007 |
| Number of Days to Update: 31 | Next Scheduled EDR Contact: 06/11/2007 |
| | Data Release Frequency: Varies |

DOT OPS: Incident and Accident Data

Department of Transportation, Office of Pipeline Safety Incident and Accident data.

| | |
|---|---|
| Date of Government Version: 02/14/2007 | Source: Department of Transportation, Office of Pipeline Safety |
| Date Data Arrived at EDR: 02/28/2007 | Telephone: 202-366-4595 |
| Date Made Active in Reports: 04/10/2007 | Last EDR Contact: 02/28/2007 |
| Number of Days to Update: 41 | Next Scheduled EDR Contact: 05/28/2007 |
| | Data Release Frequency: Varies |

PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

| | |
|---|--|
| Date of Government Version: 10/17/2006 | Source: EPA |
| Date Data Arrived at EDR: 11/29/2006 | Telephone: 202-566-0500 |
| Date Made Active in Reports: 01/11/2007 | Last EDR Contact: 05/11/2007 |
| Number of Days to Update: 43 | Next Scheduled EDR Contact: 08/06/2007 |
| | Data Release Frequency: Annually |

MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

| | |
|---|--|
| Date of Government Version: 01/11/2007 | Source: Nuclear Regulatory Commission |
| Date Data Arrived at EDR: 01/26/2007 | Telephone: 301-415-7169 |
| Date Made Active in Reports: 02/27/2007 | Last EDR Contact: 04/02/2007 |
| Number of Days to Update: 32 | Next Scheduled EDR Contact: 07/02/2007 |
| | Data Release Frequency: Quarterly |

MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

| | |
|---|--|
| Date of Government Version: 02/06/2007 | Source: Department of Labor, Mine Safety and Health Administration |
| Date Data Arrived at EDR: 03/28/2007 | Telephone: 303-231-5959 |
| Date Made Active in Reports: 05/14/2007 | Last EDR Contact: 03/28/2007 |
| Number of Days to Update: 47 | Next Scheduled EDR Contact: 06/25/2007 |
| | Data Release Frequency: Semi-Annually |

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

| | |
|---|--|
| Date of Government Version: 01/18/2007 | Source: EPA |
| Date Data Arrived at EDR: 01/23/2007 | Telephone: (415) 947-8000 |
| Date Made Active in Reports: 02/27/2007 | Last EDR Contact: 05/14/2007 |
| Number of Days to Update: 35 | Next Scheduled EDR Contact: 07/02/2007 |
| | Data Release Frequency: Quarterly |

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

| | |
|---|---|
| Date of Government Version: 04/17/1995 | Source: EPA |
| Date Data Arrived at EDR: 07/03/1995 | Telephone: 202-564-4104 |
| Date Made Active in Reports: 08/07/1995 | Last EDR Contact: 03/05/2007 |
| Number of Days to Update: 35 | Next Scheduled EDR Contact: 06/04/2007 |
| | Data Release Frequency: No Update Planned |

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

| | |
|---|--|
| Date of Government Version: 12/31/2005 | Source: EPA/NTIS |
| Date Data Arrived at EDR: 03/06/2007 | Telephone: 800-424-9346 |
| Date Made Active in Reports: 04/13/2007 | Last EDR Contact: 03/06/2007 |
| Number of Days to Update: 38 | Next Scheduled EDR Contact: 06/11/2007 |
| | Data Release Frequency: Biennially |

STATE AND LOCAL RECORDS

SHWS: Sites List

Facilities, sites or areas in which the Office of Hazard Evaluation and Emergency Response has an interest, has investigated or may investigate under HRS 128D (includes CERCLIS sites).

| | |
|---|--|
| Date of Government Version: 07/24/2006 | Source: Department of Health |
| Date Data Arrived at EDR: 07/27/2006 | Telephone: 808-586-4249 |
| Date Made Active in Reports: 08/30/2006 | Last EDR Contact: 04/18/2007 |
| Number of Days to Update: 34 | Next Scheduled EDR Contact: 06/18/2007 |
| | Data Release Frequency: Semi-Annually |

SWF/LF: Permitted Landfills in the State of Hawaii

Solid Waste Facilities/Landfill Sites. SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

| | |
|---|--|
| Date of Government Version: 05/19/2004 | Source: Department of Health |
| Date Data Arrived at EDR: 05/20/2004 | Telephone: 808-586-4245 |
| Date Made Active in Reports: 06/22/2004 | Last EDR Contact: 04/25/2007 |
| Number of Days to Update: 33 | Next Scheduled EDR Contact: 07/23/2007 |
| | Data Release Frequency: Varies |

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

LUST: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state.

| | |
|---|--|
| Date of Government Version: 01/30/2007 | Source: Department of Health |
| Date Data Arrived at EDR: 02/13/2007 | Telephone: 808-586-4228 |
| Date Made Active in Reports: 03/12/2007 | Last EDR Contact: 03/30/2007 |
| Number of Days to Update: 27 | Next Scheduled EDR Contact: 06/25/2007 |
| | Data Release Frequency: Semi-Annually |

UST: Underground Storage Tank Database

Registered Underground Storage Tanks. UST's are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. Available information varies by state program.

| | |
|---|--|
| Date of Government Version: 01/30/2007 | Source: Department of Health |
| Date Data Arrived at EDR: 02/13/2007 | Telephone: 808-586-4228 |
| Date Made Active in Reports: 03/21/2007 | Last EDR Contact: 03/30/2007 |
| Number of Days to Update: 36 | Next Scheduled EDR Contact: 06/25/2007 |
| | Data Release Frequency: Semi-Annually |

SPILLS: Release Notifications

Releases of hazardous substances to the environment reported to the Office of Hazard Evaluation and Emergency Response since 1988.

| | |
|---|--|
| Date of Government Version: 07/24/2006 | Source: Department of Health |
| Date Data Arrived at EDR: 07/27/2006 | Telephone: 808-586-4249 |
| Date Made Active in Reports: 08/30/2006 | Last EDR Contact: 04/18/2007 |
| Number of Days to Update: 34 | Next Scheduled EDR Contact: 06/18/2007 |
| | Data Release Frequency: Varies |

INST CONTROL: Sites with Institutional Controls

Voluntary Remediation Program and Brownfields sites with institutional controls in place.

| | |
|---|--|
| Date of Government Version: 07/24/2006 | Source: Department of Health |
| Date Data Arrived at EDR: 07/27/2006 | Telephone: 808-586-4249 |
| Date Made Active in Reports: 08/30/2006 | Last EDR Contact: 04/18/2007 |
| Number of Days to Update: 34 | Next Scheduled EDR Contact: 06/18/2007 |
| | Data Release Frequency: Varies |

VCP: Voluntary Response Program Sites

Sites participating in the Voluntary Response Program. The purpose of the VRP is to streamline the cleanup process in a way that will encourage prospective developers, lenders, and purchasers to voluntarily cleanup properties.

| | |
|---|--|
| Date of Government Version: 07/24/2006 | Source: Department of Health |
| Date Data Arrived at EDR: 07/27/2006 | Telephone: 808-586-4249 |
| Date Made Active in Reports: 08/30/2006 | Last EDR Contact: 04/18/2007 |
| Number of Days to Update: 34 | Next Scheduled EDR Contact: 06/18/2007 |
| | Data Release Frequency: Varies |

DRYCLEANERS: Permitted Drycleaner Facility Listing

A listing of permitted drycleaner facilities in the state.

| | |
|---|--|
| Date of Government Version: 02/14/2007 | Source: Department of Health |
| Date Data Arrived at EDR: 02/15/2007 | Telephone: 808-586-4200 |
| Date Made Active in Reports: 03/12/2007 | Last EDR Contact: 04/30/2007 |
| Number of Days to Update: 25 | Next Scheduled EDR Contact: 07/30/2007 |
| | Data Release Frequency: Varies |

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

BROWNFIELDS: Brownfields Sites

With certain legal exclusions and additions, the term 'brownfield site' means real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant.

| | |
|---|--|
| Date of Government Version: 07/24/2006 | Source: Department of Health |
| Date Data Arrived at EDR: 07/27/2006 | Telephone: 808-586-4249 |
| Date Made Active in Reports: 08/30/2006 | Last EDR Contact: 04/18/2007 |
| Number of Days to Update: 34 | Next Scheduled EDR Contact: 06/18/2007 |
| | Data Release Frequency: Varies |

AIRS: List of Permitted Facilities

A listing of permitted facilities in the state.

| | |
|---|--|
| Date of Government Version: 09/07/2006 | Source: Department of Health |
| Date Data Arrived at EDR: 09/08/2006 | Telephone: 808-586-4200 |
| Date Made Active in Reports: 10/13/2006 | Last EDR Contact: 04/30/2007 |
| Number of Days to Update: 35 | Next Scheduled EDR Contact: 07/30/2007 |
| | Data Release Frequency: Varies |

TRIBAL RECORDS

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

| | |
|---|--|
| Date of Government Version: 12/31/2005 | Source: USGS |
| Date Data Arrived at EDR: 02/06/2006 | Telephone: 202-208-3710 |
| Date Made Active in Reports: 01/11/2007 | Last EDR Contact: 05/11/2007 |
| Number of Days to Update: 339 | Next Scheduled EDR Contact: 08/06/2007 |
| | Data Release Frequency: Semi-Annually |

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Iowa, Kansas, and Nebraska

| | |
|---|--|
| Date of Government Version: 09/06/2006 | Source: EPA Region 7 |
| Date Data Arrived at EDR: 10/04/2006 | Telephone: 913-551-7003 |
| Date Made Active in Reports: 11/08/2006 | Last EDR Contact: 02/19/2007 |
| Number of Days to Update: 35 | Next Scheduled EDR Contact: 05/21/2007 |
| | Data Release Frequency: Varies |

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

| | |
|---|--|
| Date of Government Version: 02/19/2007 | Source: EPA Region 8 |
| Date Data Arrived at EDR: 02/27/2007 | Telephone: 303-312-6271 |
| Date Made Active in Reports: 04/04/2007 | Last EDR Contact: 02/19/2007 |
| Number of Days to Update: 36 | Next Scheduled EDR Contact: 05/21/2007 |
| | Data Release Frequency: Quarterly |

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in New Mexico and Oklahoma.

| | |
|---|--|
| Date of Government Version: 01/04/2005 | Source: EPA Region 6 |
| Date Data Arrived at EDR: 01/21/2005 | Telephone: 214-665-6597 |
| Date Made Active in Reports: 02/28/2005 | Last EDR Contact: 02/19/2007 |
| Number of Days to Update: 38 | Next Scheduled EDR Contact: 05/21/2007 |
| | Data Release Frequency: Varies |

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Florida, Minnesota, Mississippi and North Carolina.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 03/20/2007 Source: EPA Region 4
Date Data Arrived at EDR: 04/16/2007 Telephone: 404-562-8677
Date Made Active in Reports: 05/14/2007 Last EDR Contact: 02/19/2007
Number of Days to Update: 28 Next Scheduled EDR Contact: 05/21/2007
Data Release Frequency: Semi-Annually

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 12/01/2006 Source: EPA Region 1
Date Data Arrived at EDR: 12/01/2006 Telephone: 617-918-1313
Date Made Active in Reports: 01/29/2007 Last EDR Contact: 02/19/2007
Number of Days to Update: 59 Next Scheduled EDR Contact: 05/21/2007
Data Release Frequency: Varies

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 03/01/2007 Source: EPA Region 10
Date Data Arrived at EDR: 03/01/2007 Telephone: 206-553-2857
Date Made Active in Reports: 04/04/2007 Last EDR Contact: 02/19/2007
Number of Days to Update: 34 Next Scheduled EDR Contact: 02/21/2007
Data Release Frequency: Quarterly

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 03/30/2007 Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/30/2007 Telephone: 415-972-3372
Date Made Active in Reports: 04/27/2007 Last EDR Contact: 02/19/2007
Number of Days to Update: 28 Next Scheduled EDR Contact: 05/21/2007
Data Release Frequency: Quarterly

INDIAN UST R8: Underground Storage Tanks on Indian Land

Date of Government Version: 02/19/2007 Source: EPA Region 8
Date Data Arrived at EDR: 02/27/2007 Telephone: 303-312-6137
Date Made Active in Reports: 04/04/2007 Last EDR Contact: 02/19/2007
Number of Days to Update: 36 Next Scheduled EDR Contact: 05/21/2007
Data Release Frequency: Quarterly

INDIAN UST R4: Underground Storage Tanks on Indian Land

Date of Government Version: 03/20/2007 Source: EPA Region 4
Date Data Arrived at EDR: 04/16/2007 Telephone: 404-562-9424
Date Made Active in Reports: 05/14/2007 Last EDR Contact: 02/19/2007
Number of Days to Update: 28 Next Scheduled EDR Contact: 05/21/2007
Data Release Frequency: Semi-Annually

INDIAN UST R7: Underground Storage Tanks on Indian Land

Date of Government Version: 09/06/2006 Source: EPA Region 7
Date Data Arrived at EDR: 10/04/2006 Telephone: 913-551-7003
Date Made Active in Reports: 11/08/2006 Last EDR Contact: 02/19/2007
Number of Days to Update: 35 Next Scheduled EDR Contact: 05/21/2007
Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land

Date of Government Version: 01/11/2007 Source: EPA Region 6
Date Data Arrived at EDR: 01/12/2007 Telephone: 214-665-7591
Date Made Active in Reports: 01/29/2007 Last EDR Contact: 02/19/2007
Number of Days to Update: 17 Next Scheduled EDR Contact: 05/21/2007
Data Release Frequency: Semi-Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

INDIAN UST R5: Underground Storage Tanks on Indian Land

| | |
|---|--|
| Date of Government Version: 12/02/2004 | Source: EPA Region 5 |
| Date Data Arrived at EDR: 12/29/2004 | Telephone: 312-886-6136 |
| Date Made Active in Reports: 02/04/2005 | Last EDR Contact: 02/19/2007 |
| Number of Days to Update: 37 | Next Scheduled EDR Contact: 05/21/2007 |
| | Data Release Frequency: Varies |

INDIAN UST R10: Underground Storage Tanks on Indian Land

| | |
|---|--|
| Date of Government Version: 03/01/2007 | Source: EPA Region 10 |
| Date Data Arrived at EDR: 03/01/2007 | Telephone: 206-553-2857 |
| Date Made Active in Reports: 04/04/2007 | Last EDR Contact: 02/19/2007 |
| Number of Days to Update: 34 | Next Scheduled EDR Contact: 05/21/2007 |
| | Data Release Frequency: Quarterly |

INDIAN UST R9: Underground Storage Tanks on Indian Land

| | |
|---|--|
| Date of Government Version: 03/26/2007 | Source: EPA Region 9 |
| Date Data Arrived at EDR: 03/27/2007 | Telephone: 415-972-3368 |
| Date Made Active in Reports: 04/27/2007 | Last EDR Contact: 02/19/2007 |
| Number of Days to Update: 31 | Next Scheduled EDR Contact: 05/21/2007 |
| | Data Release Frequency: Quarterly |

INDIAN UST R1: Underground Storage Tanks on Indian Land

A listing of underground storage tank locations on Indian Land.

| | |
|---|--|
| Date of Government Version: 12/01/2006 | Source: EPA, Region 1 |
| Date Data Arrived at EDR: 12/01/2006 | Telephone: 617-918-1313 |
| Date Made Active in Reports: 01/29/2007 | Last EDR Contact: 02/19/2007 |
| Number of Days to Update: 59 | Next Scheduled EDR Contact: 05/21/2007 |
| | Data Release Frequency: Varies |

EDR PROPRIETARY RECORDS

Manufactured Gas Plants: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

| | |
|----------------------------------|---|
| Date of Government Version: N/A | Source: EDR, Inc. |
| Date Data Arrived at EDR: N/A | Telephone: N/A |
| Date Made Active in Reports: N/A | Last EDR Contact: N/A |
| Number of Days to Update: N/A | Next Scheduled EDR Contact: N/A |
| | Data Release Frequency: No Update Planned |

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

Oil/Gas Pipelines: This data was obtained by EDR from the USGS in 1994. It is referred to by USGS as GeoData Digital Line Graphs from 1:100,000-Scale Maps. It was extracted from the transportation category including some oil, but primarily gas pipelines.

Electric Power Transmission Line Data

Source: PennWell Corporation
Telephone: (800) 823-6277

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GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:

Source: American Hospital Association, Inc.

Telephone: 312-280-5991

The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing

Source: Centers for Medicare & Medicaid Services

Telephone: 410-786-3000

A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes

Source: National Institutes of Health

Telephone: 301-594-6248

Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on private school locations in the United States.

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 1999 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 and 2005 from the U.S. Fish and Wildlife Service.

STREET AND ADDRESS INFORMATION

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MEV, LLC
MAIAMA ENVIRONMENTAL

**PRELIMINARY INFORMATION
FOR ENVIRONMENTAL INVESTIGATION**

According to ASTM Standard 1527-05, the user's (or client's) responsibility in this investigation is to help identify the possibility of recognized environmental conditions in connection with the property. In order to qualify for one of the *Land Owner Liability Protections (LLPs)* offered by the small Business Liability Relief and Brownfields Revitalization Act of 2001 (the "Brownfields Amendments"), the user must provide the following information (if available) to the environmental professional. Failure to provide this information could result in a determination that "all appropriate inquiry" is not complete. Please assist us by responding to the following request for ASTM required data and other MEV requested information you may have, or of which you may have some specialized knowledge. This questionnaire will be included in the Appendices of the final report as an indication of user assistance.

Project Name: Mauji R & T Park - Kihai, 370 Acres MEV Project No: 0703-0047

Please supply as many of the following documents as possible:

- A. Tax Map Key Number/Tax Code Number 2-2-24: 04, 08, 09, 14, 15, 16, 17, 18, Pn 54
- B. Title Information (Current, and any previous ownership.)
- C. Property Legal Description (If Title Information is not available)
- D. Tax Map and/or Site Development Drawing/Plat
- E. Special Property Information (Well development data, endangered species listings, historical registration or environmental deed restrictions.)
- F. Real Estate Appraisal Report
- G. Special Management Area Permit Report (SMA) NA

Please provide the following information to the best of your ability:

1. Environmental clean-up liens that are filed or recorded against the site (40 CFR 312.25)
Are you aware of any environmental clean up liens against the property that are filed or recorded under federal, tribal, state or local law?
NONE

2. Activity and land use limitations (AULs) that are in place on the site or that have been filed or recorded in a registry (40 CFR 312.26).
Are you aware of any AULs, such as engineering controls, land use restrictions or institutional controls that are in place at the site and/or have been filed or recorded in a registry under federal, tribal, state, or local law?
NONE KNOWN

3. Specialized knowledge or experience of the person seeking to qualify for the LLP (40 CFR 312.28).
As the user of this ESA, do you have any specialized knowledge or experience related to the property or nearby properties? For example, are you involved in the same line of business as the current or former occupants of the property or an adjoining property so that you would have specialized knowledge of the chemicals and processes used by this type of business?
NA - PASTURE LAND
AGRICULTURAL

MEV, LLC

MALAMA ENVIRONMENTAL

4. Relationship of the purchase price to the fair market value of the property if it were not contaminated (40 CFR 312.29).

Does the purchase price being paid for this property reasonably reflect the fair market value of the property? If you conclude that there is a difference, have you considered whether the lower purchase price is because contamination is known or believed to be present at the property?

YES.

5. Commonly known or reasonably ascertainable information about the property if it were not contaminated (40 CFR 312.30).

Are you aware of commonly known or reasonably ascertainable information about the property that would help the environmental professional to identify conditions indicative of releases or threatened releases? For example, as user,

- a) Do you know the past uses of the property? CATTLE GRAZING
- b) Do you know of specific chemicals that are present or once were present at the property? NO
- c) Do you know of spills or other chemical releases that have taken place at the property? NO
- d) Do you know of any environmental cleanups that have taken place at the property? NOT TO MY KNOWLEDGE

6. The degree of obvlouansess of the presence or likely presence of contamination at the property, and the ability to detect the contamination by appropriate investigation (40 CFR 312.31).

As the user of this ESA, based on your knowledge and experience related to the property, are there any obvious indicators that point to the presence or likely presence of contamination at the property?

NO

Additional Information Request:

1. Name of Current Owner: MAUI R & T PARK PARTNERS & HALEAKALA BANK

2. Name of Former Owner: PARTIAL - HALEAKALA BANK

3. Environmental Site Assessments (ESA): Are you aware of any previous assessments: Phase I/II ESAs Cleanup Closure Reports, Permit Characterization Reports, etc. conducted on the subject site or within the immediate area? If yes, please supply details. NOT TO MY KNOWLEDGE

4. Local-State-Federal Inspections: Are you aware of any environmental inspections conducted by any regulatory agency, i.e., Hawaii Dept. of Health (Environmental Health Services), OSHA, U.S. Army Corps of Engineers, Department of Land & Natural Resources, Fish & Wildlife Services, HUD, EPA, or County Wastewater or Solid Waste Division of the Public Works/Waste Management Department etc.? If yes, please supply details.

NO

5. Structures/Buildings: Are there any as-built or other construction drawings available for review? Contact Name and Telephone Number: EXISTING MARTP BLDG - JOHN MALONEY 879-5263

6. Site improvements? (Renovation Date & Extent) LI

7. Proceedings Against the Property: Are you aware of any administrative or legal proceedings against the property for environmental concerns i.e., Compliance Orders, Notices of Violation? If yes, please supply details. NO

MEV, LLC

MALAMA ENVIRONMENTAL

- 8. Specialized Historic Information: Are you aware of any previous owner, neighbor, business affiliate or other individual who might have knowledge of any special or unusual historic use of, and/or previous operations conducted on the subject property? Contact Name and Telephone Number: ARCH SURVEY COMPANY
SCS ARCHAEOLOGISTS - MIKE DEGA - 808-597-1182
- 9. Manufacturing or Processing: If there are manufacturing or processing activities conducted on-site, is there an operation flow chart, diagram or procedures manual available for review? Contact Name and Telephone Number: None on site

This Phase I ESA Report is being prepared for: (Please Print)

Attention: John Maloney
 Organization: PACIFIC RIM LAND, INC.
 Address: 381 HUKULI'I PLACE, SUITE 202, KIHU, HI. 96753
 Phone no.: 808-879-5263 Fax no.: 808-879-2557

Please List Other Organizations (Lenders) Who Will Require a Listing as "Also Prepared For:" on the Phase I ESA report cover and signature page.

- (1) Attention: _____
 Organization: _____
 Address: _____
- (2) Attention: _____
 Organization: _____
 Address: _____

We will submit 2 signed reports for each project. If additional copies are required, an additional fee will be charged for processing.

Who Prepared This Starter Package Information?

| | | | |
|------------|---|---------|----------------------------|
| Print Name | <u>JOHN MALONEY</u> | Title | <u>DEVELOPMENT MANAGER</u> |
| Company | <u>PACIFIC RIM LAND, INC.</u> | | |
| Address | <u>381 HUKULI'I PLACE, SUITE 202, KIHU, HI. 96753</u> | | |
| Tel. No. | <u>808-879-5263</u> | Fax No. | <u>808-879-2557</u> |
| Signature |  | Date | <u>3-29-2007</u> |

HALEAKALA RANCH C O M P A N Y

ESTABLISHED IN 1888

April 25, 2007

Mr. Jeff Kermode
Malama Environmental, LLC
P.O. Box 880487
Pukalani, HI 96788-0487

Subject: TMK parcels (2)2-2-24: 4, 8, 9, 14, 15, 16, 17, 18 and (2)2-2-2: por. 54

Dear Mr. Kermode:

I am responding to your letter dated April 16, 2007. Haleakala Ranch Company has no knowledge of any of the activities, conditions or events cited in your inquiry related to the noted parcels. Please feel free to contact me if I can be of further assistance.

Sincerely,


J. Scott Meidell
VP/Land and Resource Manager

LINDA LINGLE
GOVERNOR OF HAWAII



CHIYOME L. FUKINO, M.D.
DIRECTOR OF HEALTH

STATE OF HAWAII
DEPARTMENT OF HEALTH

P.O. BOX 3378
HONOLULU, HAWAII 96801-3378

In reply, please refer to:
EMD/SDWB

April 27, 2007

Mr. Jeffrey Kermode
MEV, LLC
Malama Environmental
P.O. Box 880487
Fukalani, Hawai'i 96788-0487

Dear Mr. Kermode:

SUBJECT: UNDERGROUND INJECTION CONTROL (UIC);
REPLY TO YOUR INFORMATION REQUEST FOR
[REDACTED]

2. TMK: (2) 2-2-24: 04, 08, 09, 14, 15, 16 (PORTION),
17 (PORTION), 18, AND (2) 2-2-02: 54 (PORTION)
MAUI RESEARCH AND TECHNOLOGY PARK
(OFF LIPOA PARKWAY), KIHEI, MAUI, HI

Based on your submitted information, there are no UIC permits associated with the subject properties.

If a well is found at any property, please contact us so that we can determine if the injection well regulations are applicable.

If you have any questions about this subject, please call Chauncey Hew at (808) 586-4258 (Honolulu) or call direct toll free from Maui at 984-2400, ext. 64258.

Sincerely,

A handwritten signature in cursive script, appearing to read "Stuart Yamada".

STUART YAMADA, P.E., CHIEF
Safe Drinking Water Branch
Environmental Management Division

CH:cb



LINDA LINGLE
GOVERNOR OF HAWAII

CHIYOME LEINAALA FUKINO, M.D.
DIRECTOR OF HEALTH

**STATE OF HAWAII
DEPARTMENT OF HEALTH**

P.O. BOX 3378
HONOLULU, HAWAII 96801

In reply, please refer to:
EMD / WB

RFI-MEV6.wpd

April 27, 2007

Mr. Jeffrey Kermode
MEV, LLC
Malama Environmental
P.O. Box 880487
Pukalani, Hawaii 96788-0487

Dear Mr. Kermode:

Subject: Your Request for Public Records
TMK: (2) 2-2-024: 004, 008, 009, 014, 015, 016, 017, 018, &
(2) 2-2-002: 054

In response to your request, our Wastewater Branch does not have any records of pending environmental permits, licenses, citations, releases, or other information for the subject properties.

Should you have any questions, please call Marshall Lum at direct toll-free 984-2400, ext. 64294.

Sincerely,

A handwritten signature in cursive script, appearing to read "Harold K. Yee".

HAROLD K. YEE, CHIEF
Wastewater Branch

ML/mt

Notice to Requester

DATE: 4/30/07
 TO: Jeffrey Kamada, MENV, LLC FAX: (808) 573 0210
Solid and Hazardous Waste Branch
 FROM: 919 Ala Moana Boulevard, Room 212 PHONE: (808) 586-4226 FAX: (808) 586-7509

ACCESS TO THE GOVERNMENT RECORD YOU REQUESTED (copy of request attached or brief description below)

1. Maui Research and Technology Park
2. (various TUK's)
3. _____
4. _____
5. _____

will be granted in its entirety.
 cannot be granted because
 agency does not maintain the requested record.
 agency needs a further description or clarification of the requested record. Please contact the agency within _____ days or your request will be considered abandoned.
 the request would require the agency to create a summary or compilation from records that are not readily retrievable.
 _____ is denied in its entirety or will be granted only to certain part(s) of this government record. Denial of access to this or portions of this government record is denied based upon the following subsections of section 92F-13, Hawaii Revised Statutes, or other laws as cited below. The portions of the record that the agency will not disclose are described in general terms.

STATUTE

RECORD OR PORTIONS WITHHELD

METHOD AND DATE OF DISCLOSURE:

_____ Inspection at the following location: 919 Ala Moana Boulevard Rm. 212 On (date/time): 7:45 am-4:30pm (Mon-Fri)
 _____ Copy provided to you:
 _____ available for pick-up at the agency on (date/time): _____
 _____ to be mailed
 _____ transmitted by other means as requested
 _____ Incremental Disclosure: The record will be disclosed incrementally. (The agency must attach a description of extenuating circumstances that support its intention to disclose incrementally. See section 2-71-16H.A.R.)
 The first increment will be available on _____.

Should you have question about the agency's responses you may contact the department named above. If you are not satisfied with the agency's response, you may call the Office of Information Practices at (808) 586-1400

AGENCY WILL CONTACT REQUESTER WHEN RECORDS ARE AVAILABLE FOR REVIEW

MALAMA ENVIRONMENTAL (MEV, LLC)

P.O. Box 880487, Pukalani, Maui, Hawaii 96788-0487

April 16, 2007

Mr. Scott Meidell
Haleakala Ranch Co.
529 Kealaloa Avenue
Makawao, Hawaii 96768

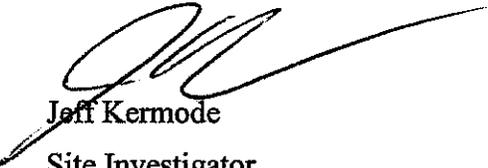
Dear Mr. Meidell,

As requested by our client, Pacific Rim Land, Inc., Malama Environmental (MEV, LLC) is conducting a Phase I Environmental Site Assessment (ESA) on the following parcels of land, TMK (2) 2-2-24: 4, 8, 9, 14, 15, 16, 17, 18 and (2) 2-2-2: portion of 54. . Tax records indicate that Haleakala Ranch Co. was a previous owner and current owner of these parcels. See attached TMK maps.

If it applies to these land parcels, could you please let us know if you have any knowledge of the following site specific information?

- knowledge of past/present on-site equipment maintenance locations or construction baseyards;
- presence of former or current underground or above-ground fuel storage tanks;
- location of bulk fertilizer/pesticide storage and/or mixing areas;
- list (inventory) of any pesticides historically/currently used on these land parcels;
- knowledge of any significant spills (petroleum or pesticides);
- location of historic/current on-site landfills (waste dumps), cesspools and/or septic tanks;
- location of any on-site groundwater wells.

Mahalo for your time and assistance. Please call me if you have any questions.



Jeff Kermode

Site Investigator

MALAMA ENVIRONMENTAL (MEV, LLC)

P.O. Box 880487, Pukalani, Maui, Hawaii 96788-0487

April 30, 2007

Administration Manager
Maui R&T Partners
360 Hoohana Street, Suite 209
Kahului, Hawaii 96732

Dear Sir / Madam,

As requested by our client, Pacific Rim Land, Inc., Malama Environmental (MEV, LLC) is conducting a Phase I Environmental Site Assessment (ESA) on the following parcels of land, TMK (2) 2-2-24: 4, 8, 9, 14, 15, 16, 17, 18 and (2) 2-2-2: portion of 54. Tax records indicate that Maui R&T Partners is a current owner of some of these parcels. See attached TMK maps.

If it applies to these land parcels, could you please let us know if you have any knowledge of the following site specific information?

- knowledge of past/present on-site equipment maintenance locations or construction baseyards;
- presence of former or current underground or above-ground fuel storage tanks;
- location of bulk fertilizer/pesticide storage and/or mixing areas;
- list (inventory) of any pesticides historically/currently used on these land parcels;
- knowledge of any significant spills (petroleum or pesticides);
- location of historic/current on-site landfills (waste dumps), cesspools and/or septic tanks;
- location of any on-site groundwater wells.

Mahalo for your time and assistance. Please call me if you have any questions.



Jeff Kermod
Site Investigator

MEV, LLC

MALAMA ENVIRONMENTAL

April 10, 2007

Maui County Fire Department
Hazardous Materials Division
200 Dairy Road
Kahului, Hawaii 96732

Attn: Mr. Jeffrey M. Kihune

RE: Request for Public Records

Dear Mr. Kihune:

We are requesting a search for any past or pending environmental permits, licenses, citations, releases, fires or other information pertaining to the site(s) described below.

SITE INFORMATION:

Project Number: 0703-0047

Tax Map Key No.: (2) 2-2-24: 04, 08, 09, 14, 15, 16 (portion), 17 (portion), 18, + (2) 2-2-02: 54 (portion).

Address: Maui Research and Technology Park
(Off Lipoa Parkway)
Kihei, Maui HI

Current Owner: Maui R & T Park Partners &
Haleakala Ranch

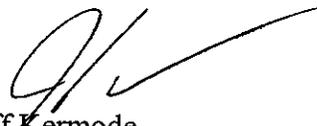
Former Owner: Partial - Haleakala Ranch

Current Occupant: Predominantly Undeveloped Land and Roadway

Type of Business: Grazing land and roadway access for Maui Research and
Technology Park.

Tax Map Key is enclosed.

Truly yours,


Jeff Kermode

MEV, LLC

MALAMA ENVIRONMENTAL

April 10, 2007

State of Hawaii Department of Health
Environmental Management Division
919 Ala Moana Boulevard, Room 206
Honolulu, HI 96814
Phone: (808) 586-4249
Via Fax: (808) 586-7537
Attn: Office of Hazard Evaluation
& Emergency Response (HEER)

Subject: REQUEST FOR PUBLIC RECORDS

Dear Sir/Madam:

We are requesting a search for any past or pending environmental permits, licenses, citations, releases, or other information pertaining to the site(s) described below.

SITE INFORMATION:

Project Number: 0703-0047

Tax Map Key No.: (2) 2-2-24: 04, 08, 09, 14, 15, 16 (portion), 17 (portion), 18, + (2) 2-2-02:
54 (portion).

Address: Maui Research and Technology Park
(Off Lipoa Parkway)
Kihei, Maui HI

Current Owner: Maui R & T Park Partners &
Haleakala Ranch

Former Owner: Partial - Haleakala Ranch

Current Occupant: Predominantly Undeveloped Land and Roadway

Type of Business: Grazing land and roadway access for Maui Research and
Technology Park.

Tax Map Key is enclosed.

Truly yours,



Jeffrey Kermod

Project Manager

Date

MEV, LLC

MALAMA ENVIRONMENTAL

April 10, 2007

State of Hawaii Department of Health
Environmental Management Division
919 Ala Moana Boulevard, Room 212
Honolulu, HI 96814
Phone: (808) 586-4226

Attn: Solid & Hazardous Waste Branch

Subject: REQUEST FOR PUBLIC RECORDS

Dear Sir/Madam:

We are requesting a search for any past or pending environmental permits, licenses, citations, releases, or other information pertaining to the site(s) described below.

SITE INFORMATION:

Project Number: 0703-0047

Tax Map Key No.: (2) 2-2-24: 04, 08, 09, 14, 15, 16 (portion), 17 (portion), 18, + (2) 2-2-02: 54 (portion).

Address: Maui Research and Technology Park
(Off Lipoa Parkway)
Kihei, Maui HI

Current Owner: Maui R & T Park Partners &
Haleakala Ranch

Former Owner: Partial - Haleakala Ranch

Current Occupant: Predominantly Undeveloped Land and Roadway

Type of Business: Grazing land and roadway access for Maui Research and
Technology Park.

Tax Map Key is enclosed.

Truly yours,



Jeffrey Kermode

MEV, LLC

MALAMA ENVIRONMENTAL

April 10, 2007

State of Hawaii Department of Health
Environmental Management Division
919 Ala Moana Boulevard, Room 301
Honolulu, HI 96814
Phone: (808) 586-4309
Attn: Clean Water Branch

VERBAL RESPONSE RECEIVED
• NO RECORD
• DATE: 5/9/07
• BY: [Signature]

Subject: REQUEST FOR PUBLIC RECORDS

Dear Sir/Madam:

We are requesting a search for any past or pending environmental permits, licenses, citations, releases, or other information pertaining to the site(s) described below.

SITE INFORMATION:

Project Number: 0703-0047

Tax Map Key No.: (2) 2-2-24: 04, 08, 09, 14, 15, 16 (portion), 17 (portion), 18, (2) 2-2-02: 54 (portion).

Address: Maui Research and Technology Park
(Off Lipoa Parkway)
Kihei, Maui HI

Current Owner: Maui R & T Park Partners &
Haleakala Ranch

Former Owner: Partial - Haleakala Ranch

Current Occupant: Predominantly Undeveloped Land and Roadway

Type of Business: Grazing land and roadway access for Maui Research and
Technology Park.

Tax Map Key is enclosed.

Truly yours,



Jeffrey Kermode

MEV, LLC

MALAMA ENVIRONMENTAL

April 10, 2007

State of Hawaii Department of Health
Environmental Management Division
919 Ala Moana Boulevard, Room 308
Honolulu, HI 96814
Phone: (808) 586-4258
Fax: (808) 586-4370

Attn: Safe Drinking Water Branch

Subject: REQUEST FOR PUBLIC RECORDS

Dear Sir/Madam:

We are requesting a search for any past or pending environmental permits, licenses, citations, releases, or other information pertaining to the site(s) described below.

SITE INFORMATION:

Project Number: 0703-0047

Tax Map Key No.: (2) 2-2-24: 04, 08, 09, 14, 15, 16 (portion), 17 (portion), 18, +(2) 2-2-02: 54 (portion).

Address: Maui Research and Technology Park
(Off Lipoa Parkway)
Kihei, Maui HI

Current Owner: Maui R & T Park Partners &
Haleakala Ranch

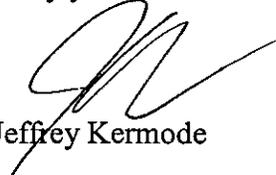
Former Owner: Partial - Haleakala Ranch

Current Occupant: Predominantly Undeveloped Land and Roadway

Type of Business: Grazing land and roadway access for Maui Research and
Technology Park.

Tax Map Key is enclosed.

Truly yours,



Jeffrey Kermode

MEV, LLC

MALAMA ENVIRONMENTAL

April 10, 2007

Hawaii State Department of Health
919 Ala Moana Blvd., Room 203
Honolulu, HI 96814
Attn: Wastewater Branch

Subject: REQUEST FOR PUBLIC RECORDS

Dear Sir:

We are requesting a search for any past or pending environmental permits, licenses, citations, releases, or other information pertaining to the site(s) described below.

SITE INFORMATION:

Project Number: 0703-0047

Tax Map Key No.: (2) 2-2-24: 04, 08, 09, 14, 15, 16 (portion), 17 (portion), 18, & (2) 2-2-02:54 (portion).

Address: Maui Research and Technology Park
(Off Lipoa Parkway)
Kihei, Maui HI

Current Owner: Maui R & T Park Partners &
Haleakala Ranch

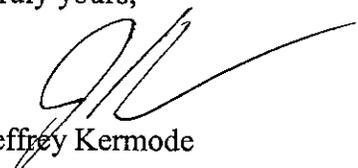
Former Owner: Partial - Haleakala Ranch

Current Occupant: Predominantly Undeveloped Land and Roadway

Type of Business: Grazing land and roadway access for Maui Research and
Technology Park.

Tax Map Key is enclosed.

Truly yours,


Jeffrey Kermode

Appendix C:

Qualifications of Environmental Professionals

MEV, LLC

Malama Environmental

STATEMENT OF QUALIFICATIONS

for

Jeffrey E. Kermode, Environmental Projects' Manager

Company Position

Environmental Projects Manager

**Responsibilities
and Duties:**

- Phase I & II Environmental Site Assessments/Investigations
- Phase III Remediation Projects
- Underground Storage Tank (UST) Closures
- Asbestos Inspections, Air Monitoring and Supervision of Removal
- Lead-Based Paint Inspections, Risk Assessments and Supervision of Removal
- Indoor Air Quality Investigations and Mold Remediation Project Management
- Erosion Control Plan (BMP) Development
- Site Safety Officer for Sampling/Remediation Projects

Experience:

- Soil and Groundwater Investigations/Remediation
- UST Removal and Closure
- Hazardous Materials Management
- Asbestos and Lead-Based Paint Projects (Inspections, Monitoring, Removal)
- Air Quality Sampling for Particulate and Microbiological Contaminants
- Wetland Delineation
- Erosion Control and Pollution Prevention Planning and Implementation for Large Scale Construction Projects
- Underground Injection Control (UIC) Permitting
- Environmental Report Writing and Compilation
- Conducted On-Site Oil Spill Response Training Courses, Assessed Clients' Response Preparedness, and Assisted in the Development of Oil Spill Contingency Plans
- Oil Spill Clean-Up Operations
- Pelagic and Coastal Fisheries Research as a Scientific Observer

**Training &
Education**

- Registered Environmental Assessor I, State of California
- Bachelor of Technology Program, Environmental Engineering, B.C.I.T. Burnaby, B.C., 1997-1999.
- Bachelor of Arts, Geography, University of B.C., Vancouver, Canada, 1989
- AHERA (Asbestos Hazard Emergency Response Act) Inspector for Asbestos, US EPA Certified
- OSHA HAZWOPER Certification (40 Hr)
- Lead-Based Paint Risk Assessor, US EPA Certified
- Lead-Based Paint Contractor Supervisor, US EPA Certified

MEV, LLC

Malama Environmental

JOHN S. VUICH
President & CEO

STATEMENT OF QUALIFICATIONS:

M. S. Geological Engineering, University of Arizona
B. S. Geological Engineering, University of Arizona
Registered Geologist (California)
Registered Environmental Assessor (California)
Certified Environmental Manager (Nevada)

AREAS OF EXPERTISE

ENVIRONMENTAL

- ▼ Site Assessments, Phase I, II, III Investigations
- ▼ Underground Storage Tank Closure
- ▼ Asbestos Inspection and Monitoring, Management Planning, and Abatement Project Design and Removal
- ▼ Lead-Containing Paint Surveys and Inspections, and Disturbance Design and Removal
- ▼ Site Characterization for Remedial Investigations
- ▼ Facility Operation Compliance Audits-ISO 14000 Audits
- ▼ Soils/Groundwater Remediation
- ▼ Hazardous Waste Management
- ▼ Risk Assessment Investigations
- ▼ RCRA Compliance and Closure Projects
- ▼ Expert Witness/Litigation Support
- ▼ Industrial Hygiene Qualified/Competent Person
- ▼ Mold/Fungi Sampling, Remediation and Abatement Design and Removal

GEOLOGICAL

- ▼ Hydrogeology
- ▼ Geologic Hazards Analysis
- ▼ Subsurface Excavations and Drilling Investigations and Sampling

RELEVANT EXPERIENCE

Owner-President • MEV, LLC.

Maui, HI • (June 2006 - Present)

Consulting services and project management for remediation projects, property transfers, sampling and site characterization plans, hazardous and toxic waste management, underground storage tanks, regulatory compliance, permit applications and litigation support.

Owner-President • Vuich Environmental Consultants, Inc.

Maui, and Honolulu, Oahu • (March, 1994 - Present)

Licensed contractor for asbestos, mold and lead-based paint abatement, general demolition and construction cleanup.

Project Manager • Various Environmental and Geological Companies

Southwest U.S.A • (1972-1994)

Hazardous materials' and environmental assessment. Site characterization and remediation.

OTHER CERTIFICATIONS AND TRAINING

- ▼ Asbestos & Demolition Contractor (C-19, C-24) **HI LIC #21212**
- ▼ Accredited Asbestos Contractor/Supervisor
- ▼ Continuing Education in Hazardous Materials Management, Environmental Studies and Environmental Regulations.

Appendix D:

Acronyms and Abbreviations

| Abbreviation | Definition |
|--------------|---|
| AST | Aboveground Storage Tank |
| AHERA | (Federal) Asbestos Hazard Emergency Response Act |
| ASTM | American Society for Testing and Materials |
| BACT | Best Available Control Technology |
| BLM | Bureau of Land Management |
| BTEX | Benzene, Toluene, Ethylbenzene, and Xylenes |
| CAA | Clean Air Act: Regulates Air Quality |
| CAMU | Corrective Action management Unit |
| CERCLA | Comprehensive Environmental Response, Compensation and Liability Act: Federal Superfund for Cleanup of Environmental Contamination (1980, 1986) |
| CERCLIS | CERCLA Information System (data base) |
| CESQG | Conditionally Exempt SQG: Hazardous Waste Generator less than 100 kg/mo. |
| C.F.R. | Code of Federal Regulations: National Standard Regulations |
| COLIWASA | Composite Liquid Waste Sampler |
| CRC | Chlorofluorocarbon |
| CMU | Concrete Masonry Unit |
| CWA | Clean Water Act: Regulates Water Quality (1972, 1987) |
| CZMA | Coastal Zone Management Act |
| DLNR | Department of Land and Natural Resources |
| DOT | Department of Transportation: Administers hazardous Waste Containers-Marking-Labeling-Placarding and Transportation Procedures. |
| DOH | Department Of Health (State Of Hawaii) |
| DRASTIC | EPA Standardized System for Evaluating Groundwater Pollution Potential Using Hydrogeologic Settings. |
| EIS | Environmental Impact Statement |
| EPA | Environmental Protection Agency: Administers CERCLA, RCRA and SARA |
| FID | Flame Ionization Detector |
| FIFRA | Federal Insecticide, Fungicide and Rodenticide Act: Regulates Pesticides (1972, 1988) |
| FSP | Field Sampling Plan |
| FWPCA | Federal Water Pollution Control Act |
| HAP | Hazardous Air Pollutant |
| HCS | (OSHA) Hazard Communication Standard |
| HSWA | (Federal) Hazardous and Solid Waste Amendments of 1984 |
| LEL | Lower Explosive Limit |
| LQG | Large Quantity Generators; Hazardous Waste Generator in Excess of 100 kg/mo. |
| LUST | Leaking Underground Storage Tank. |
| MCL | Maximum Contaminant Level |
| MCLG | Maximum Contaminant Level Goal |
| MSDS | Material Safety Data Sheets: Hazard Information Required for Chemical Substances by OSHA |
| NAAQs | National Ambient Air Quality Standards |
| NEPA | National Environmental Policy Act |
| NESHAP | National Emission Standards for Hazardous Air Pollutants (Under CAA Regulations) |
| NPDES | National Pollutant Discharge Elimination System |
| NPL | National Priorities List |
| O&M | Operating and Maintenance |
| OCS | Outer Continental Shelf |
| OSHA | Occupational Safety and Health Act: Established Hazard Communication Program and Employee Right-to-Know Law (1970) |
| OVA | Organic Vapor Analyzer |
| PCB | Polychlorinated Biphenyls: Toxic Substance Used in Electric-Device Cooling. |
| PCI/l | Picocuries Per Liter |
| PEL | Permissible Airborne Exposure Level |
| PID | Photoionization Detector |

| | |
|--|--|
| POTW | Publicly Owned Treatment Works |
| ppb | parts per billion |
| ppm | parts per million |
| PWP | Project Work Plan |
| PRPs | Potentially Responsible Parties |
| QA/QC | Quality Assurance/Quality Control |
| QAPP | Quality Assurance Project Plan |
| RBCA | Risk Based Corrective Action and Decision-Making at Sites with Contaminated Soil and Groundwater. (Hawaii DOH) |
| RCRA | Resource Conservation and Recovery Act: Federal Hazardous Waste Management Law. Regulates Waste Generation, Transportation, Treatment, Storage or Disposal Sites (1976, 1984) |
| RQ | Reportable Quantity |
| RUST | Registry of Underground Storage Tanks |
| SAP | Sampling & Analysis Plan |
| SARA | Superfund Amendments and Reauthorization Act: Amends CERCLA and includes Community Right to Know Law. Requires facilities report their chemical inventories and emissions (1986). |
| SDWA | Safe Drinking Water Act: Establishes maximum contaminant levels for drinking water (1974, 1986). |
| SHSP | Site Health & Safety Plan |
| SIC | Standard Industrial Classification |
| SIP | State implementation plan |
| SPCC | Spill Prevention Control and Countermeasure |
| SQG | Small Quantity Generator: Hazardous Waste Generator between 100-1000 kg/mo. |
| TCLP | Toxicity Characteristic Leaching Procedure: A toxicity test for certain substances declared hazardous by the EPA. |
| TMK | (Hawaii) Tax Map Key |
| TPH | Total Petroleum Hydrocarbons |
| TPQ | Threshold Planning Quantity |
| TSCA | Toxic Substances Control Act: Regulates PCBs in electrical devices and chromium in evaporative cooling towers, asbestos in schools. (1976) |
| TSD | Treatment, Storage, and Disposal |
| UEL | Upper Explosive Limit |
| UIC | Underground Injection Control |
| USGS | United States Geological Survey |
| UST | Underground Storage Tank |
| VOA | Volatile Organic Analyses |
| VOC | Volatile Organic Compound: EPA listed toxic or carcinogenic organic substances. |
| Minimal, Minor or Not Significant | 1) An unlikely or remote event, i.e., possible, but not anticipated under current conditions and observed features. 2) Insignificant when compared to regulatory acceptance levels, guideline action levels or when compared to background and/or baseline conditions of the local environment. 3) Any potential effect or impact attributed to the subject factor may be considered as the least likely source among a number of potentially responsible factors. 4) Any potential effect may not be measurable or detected by current technology. 5) Education, experience, and background of the investigator were utilized to conclude the situation or condition as trifle. |



APPENDIX C-1
Botanical and Faunal Survey

BOTANICAL AND FAUNA SURVEYS

for the

**MAUI RESEARCH AND TECHNOLOGY PARK
PROPOSED URBAN ZONING EXPANSION PROJECT**

KIHEI, MAUI, HAWAII

by

**ROBERT W. HOBODY
ENVIRONMENTAL CONSULTANT
Kokomo, Maui
October 2008**

Prepared for: Pacific Rim Land, Inc.

**BOTANICAL AND FAUNA SURVEY
MAUI RESEARCH & TECHNOLOGY PARK
PROPOSED URBAN ZONING EXPANSION PROJECT**

INTRODUCTION

The Maui Research & Technology Park Proposed Urban Zoning Expansion Project lies on approximately 356 acres of undeveloped land in upper Kihei TMK (2) 2-2-02:58 (por.) , TMK (2) 2-2-24:04,08 (por.), 14 (por.), 15,16 (por.), 17 (por.). The project area surrounds the existing facilities of Maui Research and Technology Park and is above the Elleair Maui Golf Course. This study was initiated in fulfillment of environmental requirements of the planning process.

SITE DESCRIPTION

The entire project area is presently dry pastureland located on the gentle slopes above Pi'ilani Highway. The area is an arid savannah with low rocky ridges and shallow gullies. Elevations range from 70 feet to 270 feet above sea level. Soils throughout the area are of the Waiakoa Extremely Stony Silty Clay Loam, 3-25 % slopes Series (WID2) which are 30-33 inches deep over hard igneous bedrock (Foote et al, 1972). This soil has moderate permeability, medium runoff and severe erosion hazard. Rainfall averages a scant 8-10 inches per year with the bulk falling during the winter months. (Armstrong,1983). This site lies in the driest part of Maui.

BIOLOGICAL HISTORY

Originally this area would have been a dry native forest/shrubland with such trees as wiliwili (*Erythrina sandwicensis*), 'ohe makai (*Reynoldsia sandwicensis*) and hao (*Rauvolfia sandwicensis*), shrubs such as 'a'ali'i (*Dodonaea viscosa*), ma'o (*Gossypium tomentosum*), 'ilima (*Sida fallax*) and grasses and vines such as pili (*Heteropogon contortus*), kalamalō (*Eragrostis atropioides*), huehue (*Cocculus orbiculatus*) and 'āwikiwiki (*Canavalia pubescens*).

For the past 150 years this area has been grazed by livestock, usually seasonally, following winter rains when the vegetation responds with a flush of growth. This land use has resulted in the gradual loss of native plants species and their replacement with hardy pasture grasses and weeds. During the past 40 years two other environmental disturbances have influenced conditions on the property. Introduced axis deer (*Axis axis*) have built up sizeable herds within this part of Maui. These animals are able to access steeper sites than cattle and have eliminated additional species of native plants.

Also fires have swept through this area a number of times over the years. Charred stumps were encountered throughout the property. Fires, over time, eliminate species not adapted to this type of catastrophic environmental disturbance.

Today few plants species occur on the property and those that do tend to dominate. Few of these are native.

SURVEY OBJECTIVES

This report summarizes the findings of a flora and fauna survey of the proposed Maui Research & Technology Park Project which was conducted in October, 2008. The objectives of the survey were to:

1. Document what plant, bird and mammal species occur on the property or may likely occur in the existing habitat.
2. Document the status and abundance of each species.
3. Determine the presence or likely occurrence of any native flora and fauna, particularly any that are Federally listed as Threatened or Endangered. If such occur, identify what features of the habitat may be essential for these species.
4. Determine if the project area contains any special habitats which if lost or altered might result in a significant negative impact on the flora and fauna in this part of the island.
5. Note which aspects of the proposed development pose significant concerns for plants or for wildlife and recommend measures that would mitigate or avoid these problems.

BOTANICAL SURVEY REPORT

SURVEY METHODS

A walk-through botanical survey method was used following routes to ensure maximum coverage of the many areas of this large property. Areas most likely to harbor native or rare plants such as gulches or rocky outcroppings were more intensively examined. Notes were made on plant species, distribution and abundance as well as terrain and substrate.

DESCRIPTION OF THE VEGETATION

The vegetation on this large property was dominated by just two species: kiawe (*Prosopis pallida*) and buffelgrass (*Cenchrus ciliaris*). These two species make up

more than 95% of the plant cover. The kiawe trees create an open woodland across the entire property with denser growth along the rocky gullies. The buffelgrass forms an almost uniform grassland under and between the trees. All other plant species were uncommon to rare on the property. Small parts of the property had no vegetation only bare patches of soil and surface stones.

A total of 14 species of plants were recorded during the survey. Of these only 2 were native Hawaiian species. Both 'ilima, and 'uhaloa (*Waltheria indica*) are indigenous to Hawaii as well as other countries and both native species are widespread and of common occurrence in Hawaii.

Had the survey been done during the winter or spring months, a few more plant species would have been found, mostly ephemeral, annual non-native species that either wither during the summer heat or are consumed by cattle or deer. No rare native species would be expected to sprout in this area.

DISCUSSION AND RECOMMENDATIONS

The vegetation throughout the project is dominated by just two non-native plant species, kiawe and buffelgrass. The two native Hawaiian plant species recorded, 'ilima and 'uhaloa, although of uncommon or rare occurrence on the property, are widespread and common in Hawaii in general.

No Federally listed Endangered or Threatened native plants (USFWS, 1999) were encountered during the course of the survey nor were any species that are candidate for such status seen. No special habitats or rare plant communities were seen on the property.

Because the vegetation is dominated by non-native plants, and no rare or protected species occur on or adjacent to the property, there is little of botanical concern and the proposed land uses are not expected to have a significant negative impact on the botanical resources in this part of Maui.

Because much of Kihei is a flood plain and because the soils on the property are subject to erosion, it is recommended that during any land clearing work special care be taken to use accepted contouring and terracing techniques to avoid significant soil runoff.

It is also recommended that native dryland plants known to occur in this area be incorporated into the landscape design of the completed project. The Maui County Planting Plan can be consulted for ideas.

PLANT SPECIES LIST

Following is a checklist of all those vascular plant species inventoried during the field studies. Plant families are arranged alphabetically within each of two groups: Monocots and Dicots. Taxonomy and nomenclature of the flowering plants (Monocots and Dicots) are in accordance with Wagner et al. (1999).

For each species, the following information is provided:

1. Scientific name with author citation
2. Common English or Hawaiian name.
3. Bio-geographical status. The following symbols are used:
 - endemic = native only to the Hawaiian Islands; not naturally occurring anywhere else in the world.
 - indigenous = native to the Hawaiian Islands and also to one or more other geographic area(s).
 - non-native = all those plants brought to the islands intentionally or accidentally after western contact.
 - polynesian = all those plants brought to the islands by the Hawaiians during the course of their migrations.
4. Abundance of each species within the project area:
 - abundant = forming a major part of the vegetation within the project area.
 - common = widely scattered throughout the area or locally abundant within a portion of it.
 - uncommon = scattered sparsely throughout the area or occurring in a few small patches.
 - rare = only a few isolated individuals within the project area.

| <u>SCIENTIFIC NAME</u> | <u>COMMON NAME</u> | <u>STATUS</u> | <u>ABUNDANCE</u> |
|--|---------------------|---------------|------------------|
| MONOCOTS | | | |
| POACEAE (Grass Family) | | | |
| <i>Cenchrus ciliaris</i> L. | buffelgrass | non-native | abundant |
| <i>Chloris barbata</i> (L.) Sw. | swollen fingergrass | non-native | rare |
| <i>Eragrostis pectinacea</i> (Michx.) Nees | Carolina lovegrass | non-native | uncommon |
| DICOTS | | | |
| AMARANTHACEAE (Amaranth Family) | | | |
| <i>Amaranthus spinosus</i> L. | spiny amaranth | non-native | rare |
| ASTERACEAE (Sunflower Family) | | | |
| <i>Verbesina encelioides</i> (Cav.) Benth. & Hook. | golden crown-beard | non-native | rare |
| EUPHORBIACEAE (Spurge Family) | | | |
| <i>Chamaesyce hypericifolia</i> (L.) Millsp. | graceful spurge | non-native | rare |
| FABACEAE (Pea Family) | | | |
| <i>Acacia farnesiana</i> (L.) Millsp. | klu | non-native | rare |
| <i>Desmanthus pernambucanus</i> (L.) Thellung | slender mimosa | non-native | rare |
| <i>Leucaena leucocephala</i> (Lam.) de Wit. | koa haole | non-native | rare |
| <i>Prosopis pallida</i> (Humb. & Bonpl. ex Willd.) Kunth | kiawe | non-native | abundant |
| MALVACEAE (Mallow Family) | | | |
| <i>Sida fallax</i> Walp. | 'ilima | indigenous | rare |
| <i>Waltheria indica</i> L. | 'uhaloa | indigenous | uncommon |

FAUNA SURVEY REPORT

SURVEY METHODS

A walk-through survey method was conducted in conjunction with the botanical survey. All parts of the project area were covered. Field observations were made with the aid of binoculars and by listening to vocalizations. Notes were made on species abundance, activities and location as well as observations of trails, tracks scat and signs of feeding. In addition an evening visit was made to the area to record crepuscular activities and vocalizations and to see if there was any evidence of occurrence of the Endangered Hawaiian hoary bat (*Lasiurus cinereus semotus*) in the area.

RESULTS

MAMMALS

Three mammal species were observed on the property during two site visits. Taxonomy and nomenclature follow Tomich (1986).

Cattle (*Bos taurus*) – Cattle sign was seen over the entire property. One herd was seen during the survey. Larger numbers of cattle are pastured here during the wet season until grass resources are consumed.

Axis deer (*Axis axis*) – Deer sign was found on all parts of the property. This included tracks, droppings, antler rubbings and feeding signs. These herbivores spend the day bedded down in protected locations, then come out in the evening to feed.

Cat (*Felis catus*) – Cat tracks and scat were observed on dusty roads within the project area. Feral cats wander throughout the area hunting for rodents and birds.

Other mammals that likely occur on the property, but which were not seen, include rats (*Rattus rattus*), mice (*Mus domesticus*), mongoose (*Herpestes auropunctatus*) and pigs (*Sus scropha*). Rats and mice feed on seeds and herbaceous vegetation and mongoose hunt for the rodents as well as birds. Feral pigs are scattered throughout the dry country and make forays onto adjacent landscaped properties to feed at night.

A special effort was made to look for the native Hawaiian hoary bat by making an evening survey of the property. These bats are known to occur sporadically at mid elevations across Kula. While they have been rarely recorded in the Kihei area, little is known about their habitats and range in this locality. When present in an area they can be easily identified as they forage for insects, their distinctive flight patterns clearly

visible in the glow of twilight. No evidence of such activity was observed though visibility was excellent and plenty of flying insects were seen. In addition a bat listening device (Batbox IIID) was employed, set to the frequencies of 27,000 to 28,000 hertz, which is the frequency range these bats are known to use. No bats were detected using this unit.

BIRDS

There were moderate numbers of a diverse array of birds observed on the property despite the dry conditions and general lack of feed. Fourteen species of non-native birds including one migratory species were recorded. Taxonomy and nomenclature follow American Ornithologists' Union (2005).

Zebra dove (*Geopelia striata*) – Small groups of these doves were seen and heard on all parts of the property feeding in ground clearings.

Common myna (*Acridotheres tristis*) – Mynas were seen throughout the property in the kiawe trees and flying about.

Spotted dove (*Streptopelia chinensis*) – Several of these large doves were seen flying across the property and landing in the kiawe trees.

Nutmeg mannikin (*Lonchura punctulata*) – Small flocks of these small light brown birds were seen in the trees.

Gray francolin (*Francolinus pondicerianus*) – Families of these francolins were seen on the margins of grassy openings and their calls were heard across the property.

House sparrow (*Passer domesticus*) – Several small flocks of these sparrows were seen feeding in kiawe trees.

House Finch (*Carpodacus mexicanus*) – Flocks of these finches were observed in kiawe trees in the early mornings and pairs were seen thereafter flying between trees.

Red-crested cardinal (*Paroaria coronata*) - Several red-crested cardinals were seen in a kiawe tree feeding on Kiawe beans.

Pacific golden-plover (*Pluvialis fulva*) – A few individuals were seen feeding in openings across the property.

Java sparrow (*Padda oryzivora*) – Two substantial flocks of these colorful birds were seen in kiawe trees on the lower part of the property during the mornings.

Northern mockingbird (*Mimus polyglottos*) – Two mockingbirds were seen in a kiawe tree feeding on kiawe beans.

Japanese white-eye (*Zosterops japonica*) – Two white-eyes were seen feeding in a kiawe tree near the bottom of the property.

Northern cardinal (*Cardinalis cardinalis*) – Two of these red birds were seen in the kiawe trees. More were heard calling further afield.

Black francolin (*Francolinus francolinus*) – One of these striking brown and black birds was seen on the ground near the bottom of the property.

A few other non-native birds might be expected to be found on this property such as wild turkey (*Meleagris gallopavo*), African silverbill (*Lonchura cantans*) and cattle egret (*Bubulcus ibis*). This area in its present condition is not suitable for Hawaii's native forest birds that typically live at much higher elevations in native forests.

INSECTS

While insects in general were not tallied, they were abundant throughout the area and fueled the bird life observed. One native Sphingid moth, Blackburn's sphinx moth (*Manduca blackburni*) has been put on the Federal Endangered species list and this designation requires special focus (USFWS 2000). Blackburn's sphinx moth is known to occur in parts of East Maui and Central Maui but is not presently known from the Kihei area. Its native host plants are species of 'aiea (*Nothocestrum spp.*) and non-native alternative host plants are tobacco (*Nicotiana tabacum*) and tree tobacco (*Nicotiana glauca*). None of these plants were found on the property, and no Blackburn's sphinx moth or their larvae were seen.

CONCLUSIONS AND RECOMMENDATIONS

Fauna surveys are seldom comprehensive due to the short window of observation, the seasonal nature of animal activities and the usually unpredictable nature of their daily movements. This survey, however, should be considered fairly representative due to the abundance of food resources present throughout and adjacent to the area and the resulting level of animal use. No native forest birds occur anywhere in the vicinity of this property. All of the other bird species are widespread and common and of no particular environmental concern.

It is noted that while the threatened Newell's Shearwater (*Puffins auricularis newelli*) and endangered Hawaiian Petrel (*Pterodrom phaeopygia sandwichensis*) were not observed on the property during the site visits, these seabirds are known to occur and use habitats high within the mountains of Maui. They fly over lowland sites during the breeding season (March through December) to access their burrows in the mountains.

It is recommended that the following mitigation measures be implemented to minimize potential impacts to these seabirds.

- Lights within the project area to be shielded so the bulb is not visible at or above the bulb height.
- No night construction associated with the development of the project during the peak fallout period September 15 to December 15.
- Disseminate information about seabird fallout to all staff working on site prior to initiation of work.
- In the event that a downed seabird is found alive, contact the U.S. Fish and Wildlife Service within 24 hours.
- If the seabird is found alive, place the bird in a kennel and contact the Hawaii Department of Land and Natural Resources Biologist or the National Park Service Biologist for instructions on where to bring the bird.

No Federally Endangered or Threatened species were encountered during the course of the survey and no special habitats were identified. The proposed changes in land use should have no significant negative impact on the fauna resources in this part of Maui.

No special recommendations are deemed necessary or appropriate with regard to the fauna resources on this property.

ANIMAL SPECIES LIST

Following is a checklist of the animal species inventoried during the field work. Animal species are arranged in descending abundance within two groups: Mammals and Birds. For each species the following information is provided:

1. Common name
2. Scientific name
3. Bio-geographical status. The following symbols are used:

endemic = native only to Hawaii; not naturally occurring anywhere else in the world.

indigenous = native to the Hawaiian Islands and also to one or more other geographic area(s).

migratory = all species that spend part of their annual life cycle in Hawaii and part of it elsewhere. Migrant birds typically spend their spring and summer months breeding in the arctic and their fall and winter months in Hawaii.

non-native = all those animals brought to Hawaii intentionally or accidentally after western contact.

4. Abundance of each species within the project area:

abundant = many flocks or individuals seen throughout the area at all times of day.

common = a few flocks or well scattered individuals throughout the area.

uncommon = only one flock or several individuals seen within the project area.

rare = only one or two seen within the project area.

| <u>COMMON NAME</u> | <u>SCIENTIFIC NAME</u> | <u>STATUS</u> | <u>ABUNDANCE</u> |
|-----------------------|----------------------------------|---------------|------------------|
| <u>MAMMALS</u> | | | |
| Cattle | <i>Bos taurus</i> | non-native | common |
| Axis deer | <i>Axis axis</i> | non-native | common |
| Feral cat | <i>Felis catus</i> | non-native | rare |
| <u>BIRDS</u> | | | |
| Zebra dove | <i>Geopelia striata</i> | non-native | common |
| Common myna | <i>Acridotheres tristis</i> | non-native | uncommon |
| Spotted dove | <i>Streptopelia chinensis</i> | non-native | uncommon |
| Nutmeg mannikin | <i>Lonchura punctulata</i> | non-native | uncommon |
| Gray francolin | <i>Francolinus pondicerianus</i> | non-native | uncommon |
| House sparrow | <i>Passer domesticus</i> | non-native | uncommon |
| House finch | <i>Carpodacus mexicanus</i> | non-native | uncommon |
| Red-crested cardinal | <i>Paroaria coronata</i> | non-native | rare |
| Pacific golden-plover | <i>Pluvialis fulva</i> | migratory | rare |
| Java sparrow | <i>Padda oryzivora</i> | non-native | rare |
| Northern mockingbird | <i>Mimus polyglottos</i> | non-native | rare |
| Japanese white-eye | <i>Zosterops japonicus</i> | non-native | rare |
| Northern cardinal | <i>Cardinalis cardinalis</i> | non-native | rare |
| Black francolin | <i>Francolinus francolinus</i> | non-native | rare |

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APPENDIX C-2
SWCA Botanical and Faunal Survey

**CHECKLIST OF PLANTS OBSERVED AT MAUI RESEARCH AND TECHNOLOGY PARK (MRTP)
FEBRUARY 23 and MARCH 31, 2011**

Plant names are arranged alphabetically by family and then by species into each of two groups: Monocots and Dicots. The taxonomy and nomenclature of the flowering plants are in accordance with Wagner et al. (1999), Wagner and Herbst (1999), and Staples and Herbst (2005). Recent name changes are those recorded in the Hawaii Biological Survey series (Evenhuis and Eldredge, eds., 1999-2002). For each species, the following information is provided: scientific name with author citation, common English and/or Hawaiian name(s), when known; and biogeographic status.

KEY to biogeographic status:

- I = indigenous = native to the Hawaiian Islands and elsewhere;
- X = introduced or alien = all those plants brought to the Hawaiian Islands by humans, intentionally or accidentally, after Western contact, that is Cook's arrival in the islands in 1778

KEY to relative site abundance:

- A = Abundant = forming a major part of the vegetation within the project area;
- C = Common = widely scattered throughout the area or locally abundant within a portion of it;
- U = Uncommon = scattered sparsely throughout the area or occurring in a few small patches;
- R = Rare = only a few isolated individuals within the project area

KEY to surveys:

- Hobby = Robert Hobby (October 2008)
- SWCA** = SWCA, this survey (February 2011)

| Scientific Name | Common Name(s) | Status | 2011 Relative Site Abundance | Source Survey |
|--|----------------------|--------|------------------------------|----------------------|
| Monocots | | | | |
| POACEAE | | | | |
| <i>Cenchrus ciliaris</i> L. | buffelgrass | X | A A | Hobby SWCA |
| <i>Chloris barbata</i> Sw. | swollen finger grass | X | C C | Hobby SWCA |
| <i>Cynodon dactylon</i> (L.) Pers. | Bermuda grass | X | C | SWCA |
| <i>Eragrostis pectinacea</i> (Michx.) Nees | Carolina love grass | X | C C | Hobby SWCA |

| Scientific Name | Common Name(s) | Status | 2011 Relative Site Abundance | Source Survey |
|---|-----------------------------|--------|------------------------------|---------------|
| Dicots | | | | |
| AMARANTHACEAE | | | | |
| <i>Alternanthera pungens</i> Kunth | khaki weed | X | R | SWCA |
| <i>Amaranthus spinosus</i> L. | spiny amaranth, pakai kukü | X | U U | Hobby SWCA |
| <i>Amaranthus hybridus</i> subsp. <i>hybridus</i> | green amaranth | X | R | SWCA |
| ASTERACEAE | | | | |
| <i>Ageratum conyzoides</i> L. | billygoat weed, maile | X | R | SWCA |
| <i>Verbesina enceloides</i> (Cav.) Benth. & Hook. | golden crown-beard | X | R R | Hobby SWCA |
| <i>Zinnia peruviana</i> (L.) L. | pua pihi | X | R | SWCA |
| BORAGINACEAE | | | | |
| <i>Cordia subcordata</i> Lam. | kou | I | R | SWCA |
| <i>Heliotropium curassavicum</i> L. | kipükai, seaside heliotrope | I | R | SWCA |
| CONVOLVULACEAE | | | | |
| <i>Ipomoea obscura</i> (L.) Ker Gawl. | morning glory | X | R | SWCA |
| <i>Merremia aegyptia</i> (L.) Urb. | hairy merremia | X | R | SWCA |
| CUCURBITACEAE | | | | |
| <i>Lagenaria siceraria</i> (Molina) Standl. | bottle gourd | X | R | SWCA |
| EUPHORBIACEAE | | | | |
| <i>Chamaesyce hypericifolia</i> (L.) Millsp. | graceful spurge | X | - | Hobby |

| Scientific Name | Common Name(s) | Status | 2011 Relative Site Abundance | Source Survey |
|--|--|--------|------------------------------|---------------|
| <i>Euphorbia cyathophora</i> J.A.Murray | Mexican fire plant, wild poinsettia | X | R | SWCA |
| <i>Ricinus communis</i> L. | castor bean | X | R | SWCA |
| FABACEAE | | | | |
| <i>Acacia farnesiana</i> (L.) Willd. | klu | X | R R | Hobby SWCA |
| <i>Desmanthus pernamucans</i> (L.) Thellung | slender mimosa | X | - | Hobby |
| <i>Leucaena leucocephala</i> (Lam.) de Wit | koa haole | X | R R | Hobby SWCA |
| <i>Prosopis pallida</i> (Humb. & Bonpl. ex Willd.) Kunth | kiawe | X | A A | Hobby SWCA |
| <i>Samanea saman</i> (Jacq.) Merr. | monkey pod, rain tree, 'ohai, pū 'ohai | X | R | SWCA |
| LAMIACEAE | | | | |
| <i>Leonotis nepetifolia</i> (L.) R. Br. | lion's ear | X | R | SWCA |
| MALVACEAE | | | | |
| <i>Abutilon grandifolium</i> (Willd.) Sweet | hairy abutilon, ma'o | X | R | SWCA |
| <i>Malva parviflora</i> L. | cheese weed | X | C | SWCA |
| <i>Sida fallax</i> Walp. | 'ilima | I | R U | Hobby SWCA |
| MORACEAE | | | | |
| <i>Ficus microcarpa</i> L.f. | Chinese banyan | X | R | SWCA |
| SOLANACEAE | | | | |
| <i>Nicandra physalodes</i> (L.) Gaertn. | apple of Peru | X | R | SWCA |
| STERCULIACEAE | | | | |

| Scientific Name | Common Name(s) | Status | 2011 Relative Site Abundance | Source Survey |
|---------------------------------|----------------|--------|------------------------------|----------------------|
| <i>Waltheria indica</i> L. | `uhaloa | I? | U U | Hobdy SWCA |
| VERBENACEAE | | | | |
| <i>Citharexylum spinosum</i> L. | fiddlewood | X | R | SWCA |

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APPENDIX C-3
USFWS comment letter on EISPN



United States Department of the Interior



FISH AND WILDLIFE SERVICE
Pacific Islands Fish and Wildlife Office
300 Ala Moana Boulevard, Room 3-122, Box 50088
Honolulu, Hawaii 96850

In Reply Refer To:
2010-TA-0527

OCT 28 2010

Mr. Michael Summers
Senior Associate
Chris Hart & Partners, Inc.
115 North Market Street
Wailuku, Hawaii 96793

Subject: Technical Assistance for the Environmental Impact Statement Preparation Notice
for the Proposed Maui Research and Technology Park Master Plan Update, Maui

Dear Mr. Summers:

We received your letter, dated September 24, 2010, on September 28, 2010, requesting our comments regarding Maui Research Partners, LLC's plan to update the Master Plan for the Maui Research and Technology Park in Kihei, Maui. An Environmental Impact Statement (EIS) preparation notice enclosed in your letter included an Environmental Assessment addressing the project. The proposed action entails the construction of a mix of housing, office, civic, live-work, park, and retail facilities on 58 acres of the project site, development of a "Village Center" flanked by 100 acres of residential development. The site is located on the dry leeward slopes of Haleakala and it is currently managed as pastureland dominated by kiawe (*Prosopis pallid*) and buffelgrass (*Cenchrus ciliaris*).

Based on the information in your EIS preparation notice and pertinent information in our files including data compiled by the Hawaii Biodiversity and Mapping Program, we compiled a list of species and critical habitat known to occur in the vicinity of the proposed project (Table 1). Other rare endemic plant species in the vicinity include *Achyranthes splendens* var. *splendens*, *Capparis sandwichiana*, *Portulaca villosa*, and *Reynoldsia sandwicensis*.

The project area is located immediately downslope from one of the most intact examples of native dryland forests remaining in Hawaii. The forest is on State of Hawaii Department of Hawaiian Home lands property and portions of it are actively managed to conserve natural and cultural resources with funding from the Hawaii Department of Land and Natural Resources, the U.S. Fish and Wildlife Service, the U.S. Geological Survey Biological Resources Discipline, the National Park Service, and volunteer groups.

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CHRIS HART & PARTNERS, INC.
Landscape Architecture and Planning

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Table 1. Species and critical habitat known to occur in the project vicinity; increased wildfire threat may result in adverse effects to listed species and critical habitat outside the project footprint.

| Common Name | Scientific Name | Status |
|------------------------------|--|--|
| <u>Mammals</u> | | |
| Hawaiian hoary bat | <i>Lasiurus cinereus semotus</i> | Endangered |
| <u>Birds</u> | | |
| Hawaiian coot | <i>Fulica alai</i> | Endangered |
| Hawaiian duck | <i>Anas wyvilliana</i> | Endangered |
| Hawaiian goose | <i>Branta sandvicensis</i> | Endangered |
| Hawaiian petrel | <i>Pterodroma phaeopygia sandwichensis</i> | Endangered |
| Hawaiian stilt | <i>Himantopus mexicanus knudseni</i> | Endangered |
| Newell's shearwater | <i>Puffinus auricularis newelli</i> | Threatened |
| <u>Insects</u> | | |
| Anthricinan yellow-faced bee | <i>Hylaeus anthracinus</i> | Petitioned for listing |
| Assimulans yellow-faced bee | <i>Hylaeus assimulans</i> | Petitioned for listing |
| Blackburn's sphinx moth | <i>Manduca blackburni</i> | Endangered |
| Easy yellow-faced bee | <i>Hylaeus facilis</i> | Petitioned for listing |
| Longhead yellow-faced bee | <i>Hylaeus longiceps</i> | Petitioned for listing |
| Hilaris yellow-faced bee | <i>Hylaeus hilaris</i> | Petitioned for listing |
| <u>Plants</u> | | |
| Awikiwiki | <i>Canavalia pubescens</i> | Candidate |
| Native yellow hibiscus | <i>Hibiscus brackenridgei</i> | Endangered |
| No common name | <i>Bonamia menziesii</i> | Endangered |
| <u>Critical Habitat</u> | | |
| Blackburn's sphinx moth | <i>Manduca blackburni</i> | 3,965-acre Unit 1: adjacent to project area |

We recommend you incorporate the following measures into the project EIS to minimize potential impacts to these resources:

Avoid Direct Impacts to Hawaiian Hoary Bats: Although the botanical and fauna surveys conducted at the site indicated Hawaiian hoary bats were not found on the property, these animals are known to have large home ranges which may result in this species' intermittent use of the subject property. Hawaiian hoary bats roost in exotic and native woody vegetation at heights greater than 15 feet. If trees or shrubs suitable for bat roosting are cleared during the bat breeding season (April to August), there is a risk that breeding bats could inadvertently be harmed or killed. Young bats, which are incapable of flight, are particularly vulnerable during the bat birthing and pup rearing season (May 15 through August 15). To minimize potential impacts to the Hawaiian hoary bat, woody plants greater than 15 feet tall should not be removed or trimmed between May 15 and August 15 throughout the development and ongoing operation of the proposed project.

Minimize Light Impacts to Seabirds: The Newell's shearwater and Hawaiian petrel may traverse the project site in flights between their mountain nesting sites and the ocean. Outdoor lighting, such as street lights can adversely impact listed seabird species and migratory seabird species protected under the Migratory Bird Treaty Act [16 U.S.C. 703-712]. By attracting seabirds, artificially-lighted areas can disorient the birds and result in their exhaustion or collision with objects such as utility lines, guy wires, and towers that protrude above the vegetation layer. Once grounded, they are vulnerable to predators or collision with vehicles. Any increase in night-time lighting, particularly during each year's peak fallout period (September 15 through December 15), could result in seabird injury or mortality. Therefore, we recommend minimizing the use of outdoor lights. Where outdoor lights are necessary, the level of illumination should be minimized and the light should be shielded so the bulb can be seen only from below. Enclosed, please find a one-page enclosure (Enclosure 1) to assist you with your selection of light fixtures.

Minimize Attraction and Impacts to other Listed Birds: The endangered Hawaiian goose, Hawaiian coot, Hawaiian duck, and Hawaiian stilt may be attracted to drainage ditches, golf course water features, and mowed grass areas in the project site increasing their vulnerability to collision with vehicles, injuries due to golf operations, and exposure to domesticated animal predators. To minimize potential project impacts to these species, we recommend standing water be minimized, free movement of pets be prohibited, public education programs to discourage the feeding of feral animals be implemented, and sturdy animal-proof garbage containers be used to prevent increases in the populations of house mice, rats, mongoose, and feral cats. These measures should be incorporated into any project or community rules and regulations to ensure they are implemented by future occupants of project areas.

Avoid or Address Impacts to the Blackburn's Sphinx Moth: The Blackburn's sphinx moth is likely to breed and feed within the area proposed for development. The adult moth feeds on nectar from native plants including beach morning glory (*Ipomoea pes-caprae*), iliee (*Plumbago zeylanica*), maiapilo (*Capparis sandwichiana*), and the larvae feed upon non-native tree tobacco (*Nicotiana glauca*) and the native aiea (*Nothoecstrum latifolium*). Other host plants in the Solanaceae family include non-native commercial tobacco (*Nicotiana tabacum*), eggplant (*Solanum melongena*), tomato (*Lycopersicon esculentum*), and possibly jimson weed (*Datura stramonium*). Larvae of *Manduca sexta*, a close relative of the Blackburn's sphinx moth, are known to feed on a wide variety of taxa in the Solanaceae family including: sweet and chili pepper (*Capsicum* spp.), ornamental plants (*Cestrum* spp. and *Lycium* spp.), tomatillo (*Cymphomandra* spp.), petunia (*Petunia* spp.), tomatillo and ground cherry (*Physalis* spp.), *Solanandra* spp., and *Solanum* spp. (potato, eggplant, Christmas cherry, nightshade). The Blackburn's sphinx moth may also use these plants. Blackburn's sphinx moth pupae are known to lay dormant in the soil within 33 feet of host plants for one-year periods. To avoid potential impacts to the Blackburn's sphinx moth, we recommend you have a qualified biologist survey the project area for the presence of the Blackburn's sphinx moth and its potential host plants. We recommend that a knowledgeable entomologist and botanist thoroughly survey the entire site for Blackburn's sphinx moth and potential host plants used by this species during the wettest portion of the year (usually November-April). If host plants are found, please coordinate with our office and the State of Hawaii Department of Land and Natural Resources.

Survey for Yellow-Faced Bees and Protected Plant Species: We recommend a qualified entomologist survey the site for the five species of yellow-faced bee petitioned for listing to determine the extent of their occurrence on the project site. The project's Botanical and Fauna Survey, prepared by Robert Hobdy in October 2008, indicates no threatened or endangered plants were found in the areas of the project that were sampled during the dry season. We recommend that a knowledgeable botanist thoroughly survey the entire site for listed and candidate plant species during the wettest portion of the year (usually November-April).

Minimize Wildfire Impacts: Your Botanical and Fauna Survey document indicates that wildfires have burned the project area a number of times. The subject property is adjacent to one of the most intact examples of native dryland forests remaining in Hawaii, which serves as critical habitat for the Blackburn's sphinx moth. This native forest and other nearby natural resources on the leeward slopes of Haleakala would be severely impacted by a wildfire. Therefore, it is critical that actions related to your project do not result in fire impacts outside the project footprint. Along the upper edge of the project area, you should develop and maintain a drivable firebreak in conjunction with a 150-foot wide fuelbreak within which grass fuel loading does not exceed one ton per acre. In addition, we recommend you work closely with the Maui County Department of Fire and Public Safety wildland fire management specialists to minimize the risk of wildfires occurring outside the project footprint, as a result of any increases in local population that may result from the project. Preliminary calculations reviewed at the June 9, 2009, Maui Wildfire Coordinating Group meeting indicate that current fire suppression response is inadequate to achieve initial attack containment of wildfires burning under average summer fire danger conditions. We recommend you ensure fuel treatments, in combination with fire suppression responses, are adequate to ensure wildfires do not burn listed species and critical habitat in the vicinity of the project footprint.

Minimize the Spread of Invasive Species: Hawaii's native ecosystems are heavily impacted by exotic invasive plants. Whenever possible we recommend using native plants for landscaping purposes. If native plants do not meet the landscaping objectives, we recommend choosing species that are thought to have a low risk of becoming invasive. The following websites are good resources to use when choosing landscaping plants: Pacific Island Ecosystems at Risk (<http://www.hear.org/Pier/>), Hawaii-Pacific Weed Risk Assessment (http://www.botany.hawaii.edu/faculty/daehler/wra/full_table.asp) and Global Compendium of Weeds (www.hear.org/gcw).

Mr. Michael Summers

5

We hope this information assists you in developing a comprehensive and thorough Draft EIS. We appreciate your efforts to conserve endangered species. If you have questions, please contact Michelle Bogardus or Dawn Greenlee, Consultation and Habitat Conservation Planning Program Biologists (phone: 808-792-9400, fax: 808-792-9400). Please note that future correspondence should be addressed to me.

Sincerely,

A handwritten signature in black ink, appearing to read "Loyal Mehrhoff", with a long, sweeping horizontal stroke at the end.

for Loyal Mehrhoff
Field Supervisor

Enclosure

cc:

Scott Fretz, Hawaii Department of Land and Natural Resources, Division of Forestry and Wildlife, Honolulu



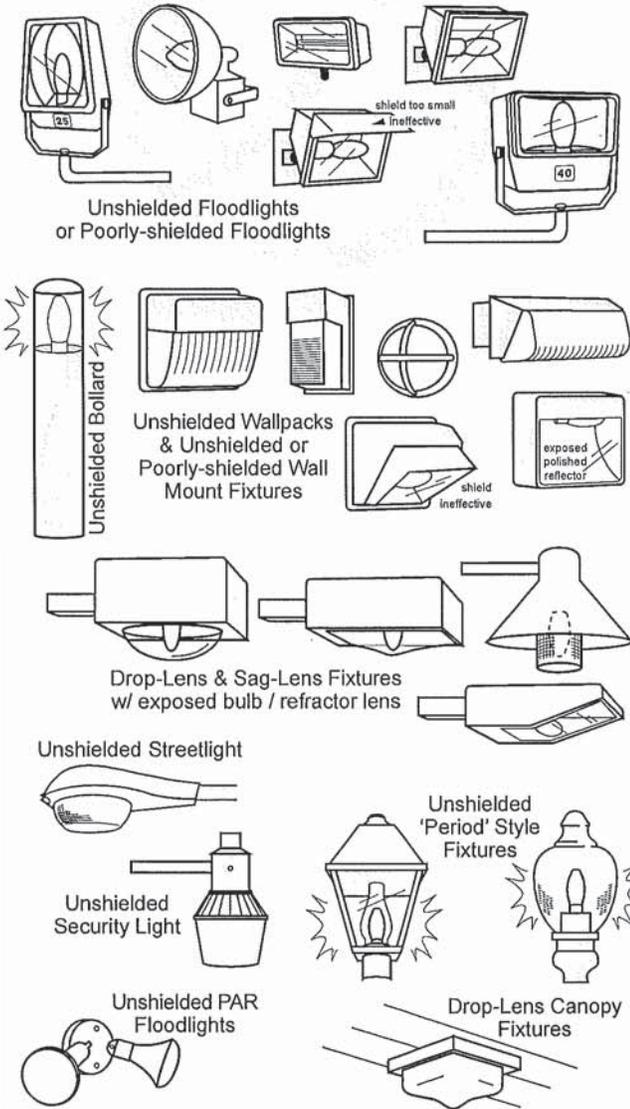
SEABIRD FRIENDLY LIGHTING SOLUTIONS

Help eliminate seabird light attraction. Select the best fixture for your application using this guide. Avoid uplighting, always shield floodlights, and aim downlights carefully to avoid light trespass. For more information go to www.kauai-seabirdhcp.info.



Unacceptable / Discouraged

Fixtures that produce glare and light trespass



Unshielded Floodlights or Poorly-shielded Floodlights

Unshielded Wallpacks & Unshielded or Poorly-shielded Wall Mount Fixtures

Drop-Lens & Sag-Lens Fixtures w/ exposed bulb / refractor lens

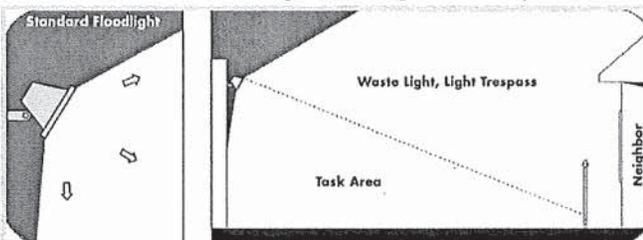
Unshielded Streetlight

Unshielded Security Light

Unshielded PAR Floodlights

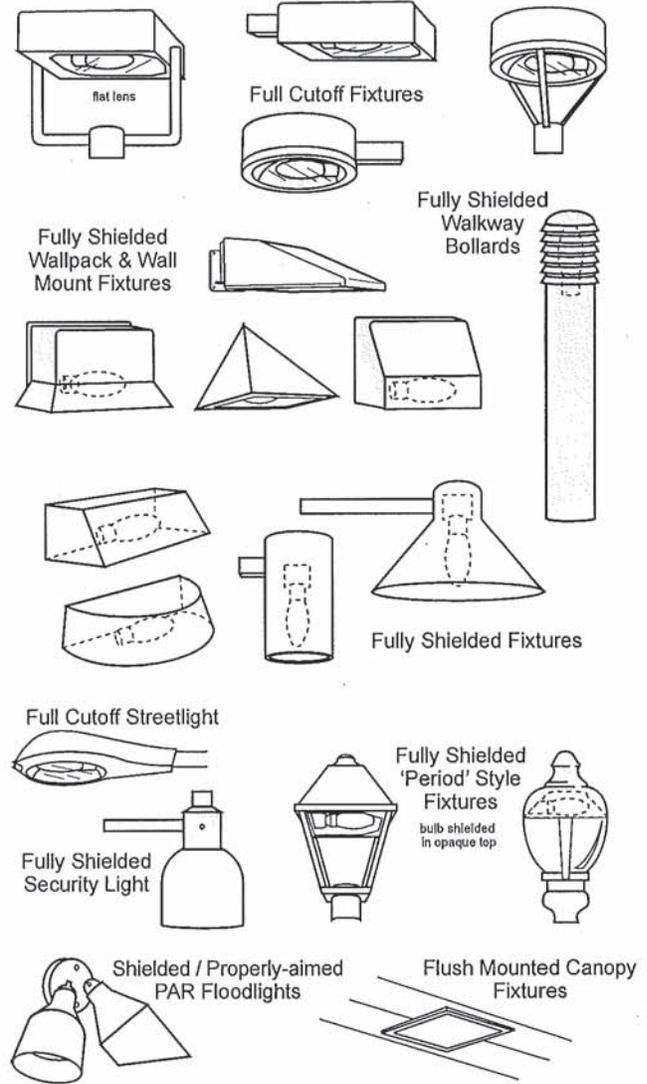
Drop-Lens Canopy Fixtures

Unshielded floodlight that is angled incorrectly



Acceptable

Fixtures that shield the light source to minimize glare and light trespass and to facilitate better vision at night



flat lens

Full Cutoff Fixtures

Fully Shielded Wallpack & Wall Mount Fixtures

Fully Shielded Walkway Bollards

Fully Shielded Fixtures

Full Cutoff Streetlight

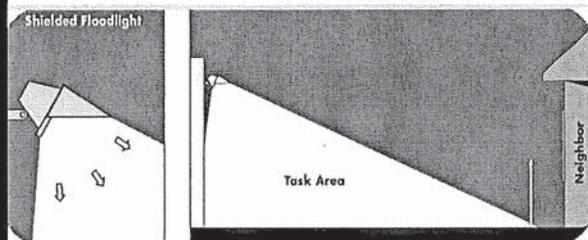
Fully Shielded Security Light

Fully Shielded 'Period' Style Fixtures bulb shielded in opaque top

Shielded / Properly-aimed PAR Floodlights

Flush Mounted Canopy Fixtures

Shielded floodlight that is angled correctly



illustrations from
www.darksky.org and
www.darksky.org



APPENDIX C-4
Applicant response letter dated April 27, 2011



Landscape Architecture
City & Regional Planning

April 27, 2011

Loyal Mehrhoff, Field Supervisor
Pacific Islands Fish and Wildlife Office
Fish and Wildlife Service
US Department of the Interior
300 Ala Moana Boulevard, Room 3-122, Box 50088
Honolulu, Hawaii 96850

Subject: Technical Assistance for the Environmental Impact Statement Preparation
Notice for the Proposed Maui Research and Technology Park Master Plan
Update, Maui

Dear Dr. Mehrhoff,

I am responding to your letter dated 28 October 2010 (2010-TA-0527) regarding Maui R&T Partners, LLC plans to update the Master Plan for the Maui Research and Technology Park (MRTP) in Kihei, Maui (Appendix A). Based on the concerns you expressed, we tasked SWCA Environmental Consultants to conduct additional botanical and wildlife reconnaissance surveys of the properties on February 23 and March 31, 2011.

Two of the 12 plant species identified on the property by Robert Hobdy in October 2008 are indigenous to Hawaii ('ilima and 'uhaloa). Hobdy noted that 'ilima was rarely observed on the property, and 'uhaloa was uncommon there. Both Hobdy and SWCA found the area to be dominated by non-native kiawe and buffelgrass. SWCA found an additional nine plant species not previously reported by Hobdy, all of which were non-native (Appendix B). *Ipomoea obscura*, a possible host plant for adult *Manduca blackburni*, was found to be rare; however, no species confirmed as larval host plants for *M. blackburni* were found within the MRTP properties. No additional species of wildlife other than those reported by Hobdy were observed by SWCA within the properties in

February and March 2011. No listed or candidate endangered species of plants or animals were observed within the property.

None of the species listed in Table 1 of your 28 October 2010 letter were found within the MRTTP properties. The easternmost boundaries of the MRTTP property lay roughly two linear miles downslope from the westernmost edge of the final boundary for the Puu O Kali Critical Habitat Unit for *Manduca blackburni* (as identified in 68 FR 111 34710-34766, June 10, 2003) and the Puu O Kali Preserve. The vacant lands separating the two areas are privately owned and dominated by buffelgrass and kiawe. In response to your concerns, Maui R&T Partners, LLC intends to incorporate the following measures into the project EIS to minimize potential impacts.

Avoid Direct Impacts to Hawaiian Hoary Bats

To minimize the potential impacts to the Hawaiian hoary bat, woody plants greater than 15 feet tall will not be removed or trimmed between July 1 and August 15 throughout the development and ongoing operation of the proposed project. These dates are fully consistent with the restrictions recommended to prevent harm to non-volant juvenile bats (F. Bonnaccorso, USGS, letter to D. Greenlee, USFWS), and have been endorsed by the Fish and Wildlife Service during clearing of non-native vegetation for the Kahuku Wind Power project and other construction projects.

Minimize Light Impacts to Seabirds

Outdoor lighting will be minimized to the extent practicable to help avoid creating an attractive nuisance to Newell's shearwaters and Hawaiian petrels that might transit over the property at night. Outdoor lights will be shielded in accordance with the guidelines for light fixtures provided with your 28 October 2010 letter.

Minimize Attraction and Impacts to Listed Birds

Expansion of the MRTTP will not involve the creation of golf course(s) or open water features. Tenants will be expected to comply with Maui County leash laws. Maui R&T Partners, LLC will institute a pest control program administered by groundskeepers aimed primarily at rodent and feral animal control.

Avoid or Address Impacts to the Blackburn's Sphinx Moth

No known larval host plants for the Blackburn's sphinx moth have been observed within the MRTP properties. A single species of non-native morning glory, *Ipomoea obscura*, was found to be rare on the property. The Fish and Wildlife Service (FWS) states that all species of *Ipomoea* may be host plants for adult Blackburn's sphinx moths (68 FR 111 34710-34766, June 10, 2003). However, given the rarity of *Ipomoea* here and the absence of larval host plants, we conclude that Blackburn's sphinx moths and their habitats will not be impacted by the MRTP.

Survey for Yellow-Faced Bees and Protected Plant Species

Biologists from SWCA Environmental Consultants surveyed the MRTP properties again in February and March 2011, and found no listed or candidate endangered plants species. Dr. Karl Magnacca has indicated that these rare bees are so far only known from areas *dominated* by native plant communities (K. Magnacca, University of Hawaii at Hilo, personal communication). Since the MRTP is dominated by non-native grasses and scrub vegetation and 'ilima is uncommon here, it is highly unlikely that the MRTP properties are habitat for Hawaiian yellow-faced bees.

Minimize Wildlife Impacts

During project construction, measures will be taken to maintain a sufficient fire break along the boundaries of the proposed MRTP expansion. When completed, the MRTP will completely remove all non-native grass, weed, and scrub fuels from an area of approximately 432 acres. Undeveloped lands immediately adjacent to the northern, and eastern and southern boundaries of the MRTP are owned by Kaonoulu Ranch and Haleakala Ranch, respectively. These lands serve as a defacto fire break for MRTP because they are currently zoned Ag and are actively grazed by cattle. Grazing plays a key role in minimizing fuel loads on privately owned lands outside the project footprint. The MRTP is currently serviced by the Kihei Fire Station which is located approximately 1.5 miles from the MRTP. Additional fire control support is also available from Windward Helicopters and Pacific Helicopters at the Kahului Airport; however, response times can vary greatly. The completed MRTP will have fire hydrants and water pressures as required by law to service the area.

Minimize the Spread of Invasive Species

Mr. Loyal Mehrhoff, Field Supervisor
Maui R&T Park
Response Letter
December 15, 2010
Page 4 of 4

During land clearing and construction associated with expansion of the MRTP, care will be taken to prevent the invasion of disturbed areas by noxious invasive weed species, non-native tree tobacco, and other potential non-native host plants of the Blackburn's sphinx moth. However, to minimize the potential for introducing new invasive plants to the project area, Maui R&T Partners, LLC would ensure that off-site sources of revegetation materials (seed mixes, gravel, mulches, etc.) are certified weed-free. All areas that are hydroseeded would be monitored for six months after hydroseeding to ensure removal of any invasive plants that have established from seeds inadvertently introduced as part of the seed mixes. Building supplies imported to Maui for construction will be regularly inspected at Kahului Harbor for presence of alien species. We will employ a palette of suitable native plant species which are known to occur within the natural dry scrubland habitats native to the Kīhei area for landscaping. To the extent practicable, we will utilize seeds of native species previously harvested from the Kīhei environs and available from local nurseries and related sources. Specific species suitable for use can include, but may not be limited to, koai'a (*Acacia koaia*), native wiliwili (*Erythrina sandwicensis*), kolomana (*Senna gaudichaudii*), and kou (*Cordia subcordata*). Other native plants, such as 'a'ali'i (*Dodonea viscosa*), 'āhinahina (*Achyranthes splendens var. rotunda*), 'āwīkīwīkī (*Canavalia pubescens*), kulu'i (*Nototrichium sandwicense*), maiapilo (*Capparis sandwichiana*), naio (*Myoporum sandwicense*), 'ōhai (*Sesbania tomentosa*), pili (*Heteropogon contortus*), and ti leaf (*Cordyline fruticosa*) and other plant species identified in the Maui County Planting Plan can be used throughout the site to the extent possible.

Thank you for expressing the concern of your agency regarding the proposed Maui Research and Technology Park. Please don't hesitate to contact me should you have any questions regarding our response.

Sincerely yours,



Michael J. Summers
Senior Associate
Chris Hart & Partners, Inc.

cc: Scott Fretz, Hawaii DLNR (DOFAW)
Steve Perkins, Pacific Rim Land



APPENDIX C-5
USFWS comment letter dated June 7, 2011



United States Department of the Interior

FISH AND WILDLIFE SERVICE
Pacific Islands Fish and Wildlife Office
300 Ala Moana Boulevard, Room 3-122, Box 50088
Honolulu, Hawaii 96850



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JUN 10 2011

In Reply Refer To:
2011-TA-0325

CHRIS HART & PARTNERS, INC
Landscape Architecture and Planning

JUN 07 2011

cc. Mike + Brett

08/132

Mr. Michael Summers
Chris Hart & Partners, Inc.
115 North Market Street
Wailuku, Hawaii 96793

Subject: Technical Assistance for the Proposed Maui Research and Technology Park
Project, Maui

Dear Mr. Summers:

The U.S. Fish and Wildlife Service (Service) is in receipt of your letter, dated April 27, 2011, in which you informed us of new survey information and additional project details for the Maui Research and Technology Park Project in Kihei, Maui. We previously provided comments on the Environmental Impact Statement (EIS) preparation notice in a letter dated October 28, 2010 (Service File 2010-TA-0527). The proposed action entails the construction of a mix of housing, office, civic, live-work, park, and retail facilities on 58 acres of the project site, development of a "Village Center" flanked by 100 acres of residential development. The project area is located immediately downslope from one of the most intact examples of native dryland forests remaining in Hawaii.

Based on the information and comments we provided, you requested additional surveys to determine whether any federally listed species occur at the project site. The additional surveys resulted in an additional nine plant species, none of which are native to Hawaii. While one species, *Ipomoea obscura*, may be a host to adult Blackburn's sphinx moth (*Manduca blackburni*; BSM), no other larval or adult host plants were identified. We understand the effort of conducting additional surveys, and appreciate your response to our previous comments. We also acknowledge the numerous conservation and avoidance measures that you have incorporated into the project description regarding impacts to seabirds, waterbirds, and the spread of invasive species. We offer the following guidance to assist you in refining your assessment of project impacts to federally listed species and native habitats.

Hawaiian hoary bat

Our previous comments advised you to avoid cutting vegetation greater than 15 feet tall during the bat pupping season (May 15 through August 15) to avoid impacts to dependent, non-volant bat pups. Your letter states that you plan to avoid cutting trees between July 1 and August 15,

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and that these dates are consistent with guidance from U.S. Geological Survey researcher Dr. Frank Bonnacorso. Dr. Bonnacorso has provided valuable insight on the life history and breeding habits of the Hawaiian hoary bat, however, we base species guidance on *all* available data.

After review of all raw data associated with Hawaiian hoary bats, we have altered our recommended avoidance dates to June 1 through September 15. This change reflects data collected by F. Bonnacorso (published and unpublished work), Theresa Menard (2001), and Tomich (data used in Menard's 2001 document). If it is determined that the proposed project cannot avoid trimming or cutting vegetation during this sensitive time period, we recommend that additional surveys be conducted to determine whether the site is occupied by bats. Please contact this office for our standardized bat survey protocol guidance document.

Blackburn's Sphinx Moth

Surveys conducted by Hobdy in 2008 and SWCA in 2011 did not find the project site to be occupied by the BSM. Additionally, no plant hosts for larval-phase BSM were found. While one plant found on site is known to be a host for adult BSM, it is described as "rare." We appreciate the additional surveys to search for BSM; however, given the proximity of occupied BSM critical habitat and the propensity for tree tobacco to grow in recently disturbed areas, we recommend that more comprehensive surveys be conducted prior to being cleared.

Minimize Wildfire Impacts

Our previous letter encouraged you to develop methods to avoid and minimize the impacts of wildfire on sensitive habitats and ecosystems upslope. The native forest and other nearby natural resources on the leeward slopes of Haleakala would be severely impacted by a wildfire. Your response to our letter indicates that non-native vegetation on the project site will be cleared to reduce the risk of fire, and that grazed ranches adjoining the property will act as de-facto fire breaks.

Despite these avoidance measures, we remain concerned that the proposed project will increase the risk of wildfire, which would significantly affect resources outside of the project footprint. We recommend you incorporate further measures to reduce the impacts of wildfire, as described in our previous letter. If your minimization methods rely on private landowners grazing their property, we suggest you develop a contractual agreement with them to address wildfire concerns.

If, in the course of your National Environmental Policy Act (NEPA) analysis, you find that the proposed project may directly or indirectly impact federally listed species, Maui Research Partners, LLC., should apply for an incidental take permit under section 10(a)(1)(A) of the Endangered Species Act of 1973 (ESA), as amended. A section 10 permit application must include a habitat conservation plan that identifies the effects of the action on listed species and their habitats, and defines measures to minimize and mitigate those adverse effects.

We hope this information assists you in developing a comprehensive and thorough Draft EIS. When the draft EIS is complete, we request a hard copy of the document. We appreciate your efforts to conserve endangered species and native ecosystems. If you have questions regarding

Mr. Michael Summers

3

these comments, please contact Michelle Bogardus, Consultation and Habitat Conservation Planning Program Biologist (phone: 808-792-9473; fax: 808-792-9581).

Sincerely,

A handwritten signature in black ink, appearing to read 'Loyal Mehrhoff', written in a cursive style.

for Loyal Mehrhoff
Field Supervisor

cc: Scott Fretz, Hawaii Department of Land and Natural Resources, Division of Forestry and Wildlife, Honolulu



APPENDIX C-6
Applicant response letter dated October 25, 2011



Landscape Architecture
City & Regional Planning

October 25, 2011

Loyal Mehrhoff, Field Supervisor
Pacific Islands Fish and Wildlife Office
Fish and Wildlife Service
US Department of the Interior
300 Ala Moana Boulevard, Room 3-122, Box 50088
Honolulu, Hawaii 96850

Subject: 2011-TA-0325, FWS Letter of June 7, 2011, Technical Assistance for the
Environmental Impact Statement Preparation Notice for the Proposed Maui Research
and Technology Park Master Plan Update, Maui

Dear Dr. Mehrhoff,

Thank you for your letter of June 7, 2011, in which you provided additional suggestions for ways to minimize potential impacts that may be associated with the proposed Maui Research and Technology Park. We offer the following response to your specific recommendations.

Hawaiian hoary bat

In light of the new information you provided regarding the pupping season for endangered Hawaiian hoary bats, we will refrain from removing or trimming woody plants greater than 15 feet tall between June 1 and September 15 throughout the development and operation of the proposed project.

Blackburn's sphinx moth

Another comprehensive survey for endangered Blackburn's sphinx moth host plants will be conducted just prior to land clearing to ensure that the species and its habitat will not be affected by the proposed project.

Minimize Wildfire Impacts

In addition to the measures described in our April 27, 2011, letter to you, we will expand our efforts to minimize the risk of wildfires which might originate within the Maui Research and

Mr. Loyal Mehrhoff, Field Supervisor
Maui R&T Park
Response Letter
October 25, 2011
Page 2 of 2

Technology Park. These efforts may include agreements with neighboring land owners. We will continue to keep your office abreast of our wildfire prevention and response measures throughout the planning process for the proposed project, and appreciate your offer of technical assistance in this matter.

Other Measures

We will continue to adhere to the additional mitigation measures we identified in our April 27, 2011 letter to you including those regarding shading for lights on the property to minimize fallout of seabirds; measures to minimize the spread of invasive species; and pest control.

Should we determine during the course of our participation in preparation of the Environmental Impact Statement (EIS) that the proposed project will directly or indirectly impact a listed endangered species, we will apply for an incidental take permit (ITP) under section 10(a)(1)(A) of the Endangered Species Act of 1973 (ESA), as amended.

Sincerely yours,



Michael Summers
Senior Associate

cc: Scott Fretz, Hawaii DLNR (DOFAW)